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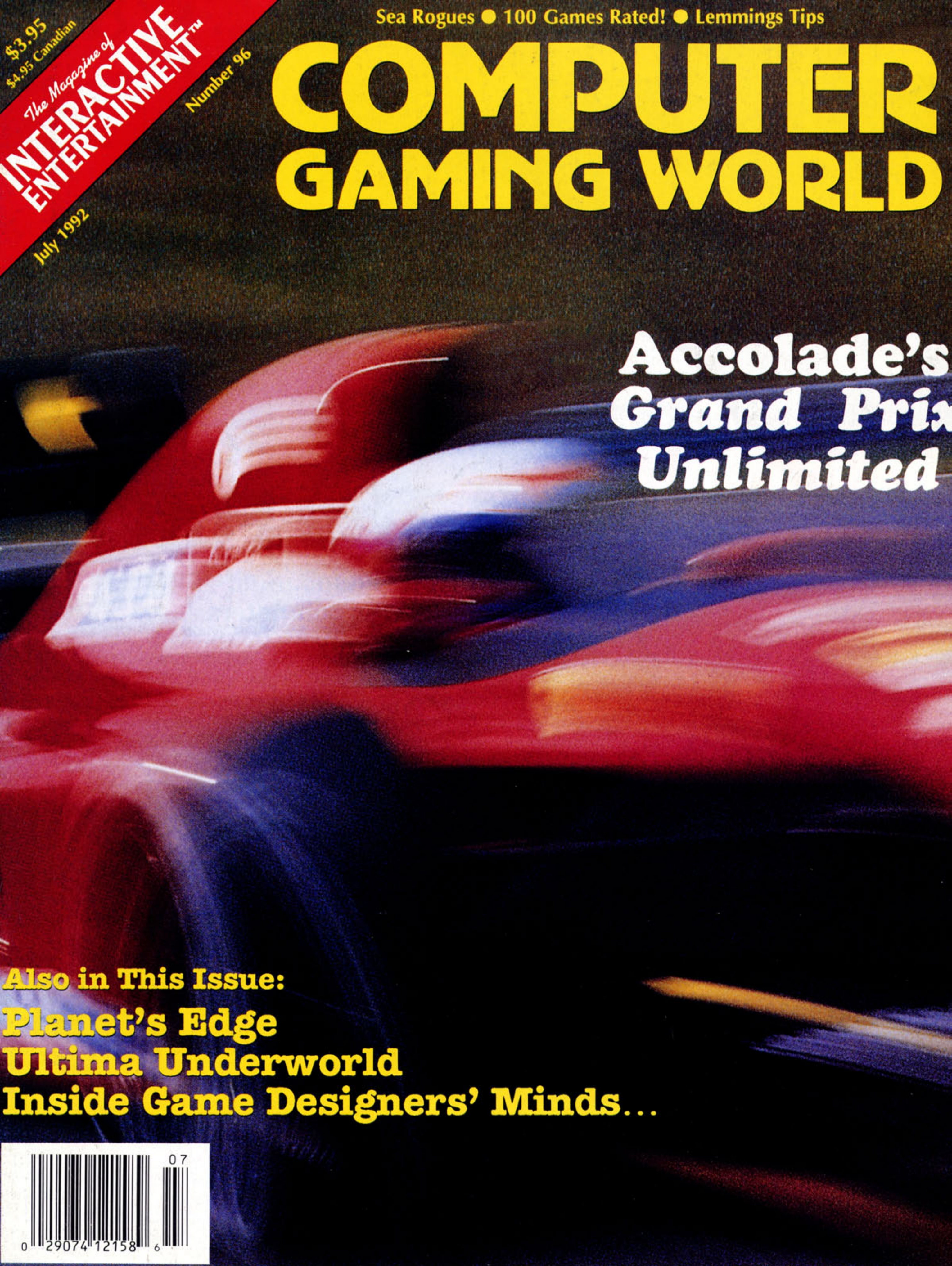
The Magazine of INTERACTIVE ENTERTAINMENT™

Number 96

July 1992

Sea Rogues ● 100 Games Rated! ● Lemmings Tips

COMPUTER GAMING WORLD



Accolade's Grand Prix Unlimited

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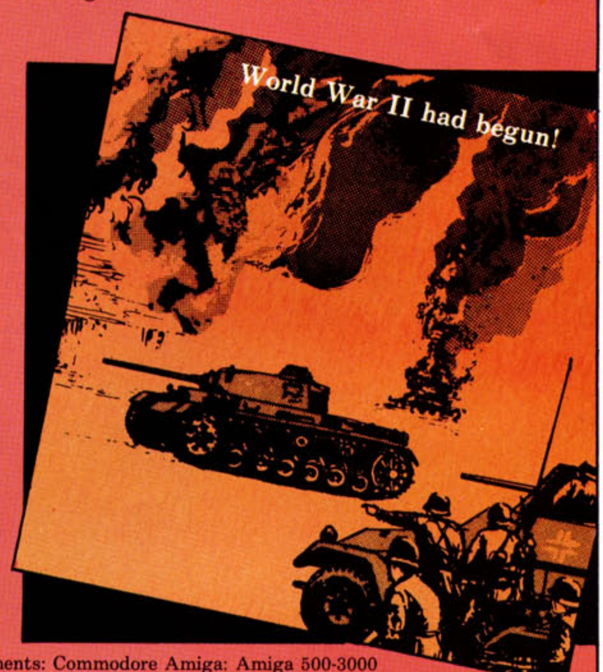
World War II, the conquest of Europe...

Out of the ashes and turmoil of post-World War I Europe an Austrian artist rose from obscurity to command the greatest military machine ever known to man. His name was Adolph Hitler. He and his band of Nazi cutthroats promised a starving German people revenge for the injustices of World War I and a Reich that would last for a thousand years.

Gaining absolute power in 1934, Hitler embarked upon the return of Germany to her previous place of prominence with massive rearmament programs. First Austria, then Czechoslovakia fell under the Nazi boot.

The west viewed the German rise to power with growing alarm, and when Germany invaded Poland on September 1, 1939, Britain and France declared war.

The stage was set for a war of such magnitude that it could only be compared to the greatest of natural disasters.



Computer Wargaming like you've never seen it!

It's more than a game, *it is the definitive historical simulation of Europe during World War II.* All the elements: *military, economic, geographical, ideological* and *chronological* are included in the game. Until now, **Third Reich** has been a game for the truly dedicated boardgamer. Recent advances in electronics now make it possible to put all of the rich detail of the boardgame into your home computer.

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COMPUTER THIRD REICH system requirements: Commodore Amiga: Amiga 500-3000 (including 1000) with one meg of RAM and color monitor. Atari ST: 520, 1040, or Mega with at least 512K RAM, double side disk drive and color monitor. (Single-side version for 520 available upon request.) See what all this excitement is all about.

Computer Third Reich is available for $39.95. Please add $6.00 shipping and handling (Canadian orders $12.00; overseas $18.00). IBM PC/PS and compatibles version is coming soon.

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Strategy Magazine had this to say: "The point and click interface is a pleasure to use...The map graphics themselves are excellent...At first I thought this new version would be too simple for the Third Reich player and too complex for the newcomer. Six hours' play changed this viewpoint."

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Psalms 9:1-2

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**VGA screen shots*
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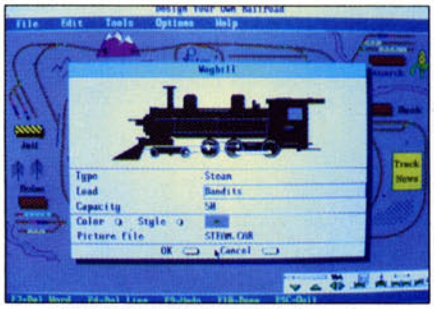
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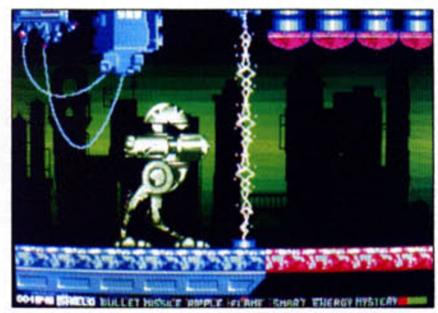
The Godfather



The Mouse Yoke



Blackjack for Windows



Under Pressure

Abracadata
Eugene, OR

WILD WEST RAILROAD ROBBERIES: This "expansion disk" for the *Design Your Own Railroad* game may well tie nostalgic rail fans to the computer railroad track. The program allows players six hours to accumulate the most money possible. Certain squares require a player to draw a track news card (which inflict random events on a player), while occasionally a railroad car picked up will be infested with bandits, at which time a bandit card is drawn and the player implements its result. These two small decks of cards are included with the disks and add more elements of gameplay to the original product's "construction kit" strengths. IBM ($19.95). Circle Reader Service #1.

Accolade
San Jose, CA

JACK NICKLAUS GOLF & COURSE DESIGN: SIGNATURE EDITION: There's a "golden bear" in them thar hills in this maxxed-out 256-color game (available to players who design their own courses using this program), with a variety of fully digitized male and female figures. Actually, "more, better, faster" is the motif for this product over its predecessor, with a new tournament mode, customizable computer opponents, capacity for designing/saving one's own "objects" on the course (we loved creating slopes and hills with railroad ties) and a new "tape measure" feature for determining distance. IBM ($69.95). Circle Reader Service #2.

Access
Salt Lake City, UT

LINKS: TROON NORTH CHAMPIONSHIP COURSE: Found in Senorian desert, this oasis-like golf course has more than plenty of sand with which to challenge *Links* owners. The Arizona view of Pinnacle Peak to the south and Scottsdale to the west is beautiful. IBM ($24.95). Circle Reader Service #3.

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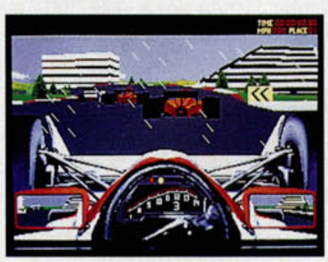


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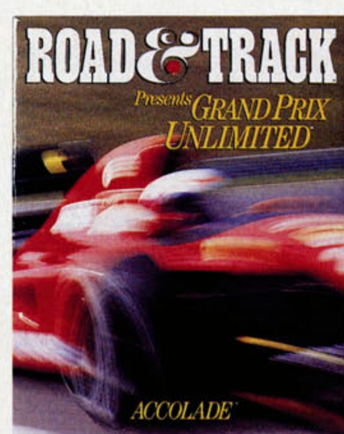


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HOME ALONE and ROCK A DOODLE COMPUTERIZED COLORING BOOKS: These products, sold separately, are quite similar to the *Fern Gully* Coloring Book "peeked" last issue. By mixing 16-color palettes, the full range of 256 colors is available to the creative artist and allows children to color in the black-and-white sketches from these two popular movies. Designed for kids ages three and older, the simple mouse interface and the ability to print on almost any driver imaginable makes these two solid "kidware" products. IBM ($29.95 each). Circle Reader Service #4.

Colorado Spectrum
748 Whalers Way, E-201
Fort Collins, CO 80525
(303) 225-6929

THE MOUSE YOKE: This piece of game support hardware enables gamers to have a flight yoke without spending too much extra money or having to reconnect input devices to one's computer. Instead, one simply straps the mouse into the yoke and flies happily away. ($34.95). Circle Reader Service #5.

Eclipse Software Design
7565 Charmant Drive #315
San Diego, CA 92122
(619) 546-3932

BLACKJACK FOR WINDOWS: Although this game has something of a "shareware" production quality to it, the gameplay stands up to any of the others on the market today. Designed to run under *Windows 3.0*, up to four players can participate "at the table." Many user-defined play variations are allowed, so that players can emulate their favorite casino's rules; complete statistical analysis and varying "systems" are also provided to help develop and improve one's gameplay. Priced right for the IBM at $29.95. Circle Reader Service #6.

Electronic Zoo
United Kingdom

UNDER PRESSURE: With the good guy imprisoned in a robot shell and his galactic girlfriend kidnapped by the bad guys, this game sets up a quick-and-dirty duel to the death. Said duel turns out to be a "meat and potatoes" vertical-scroll-around-and-shoot-everything-that-moves game. Linguists will find that the definitive "minimalist" rules in four languages can only get players going quickly. Amiga. Circle Reader Service #7.

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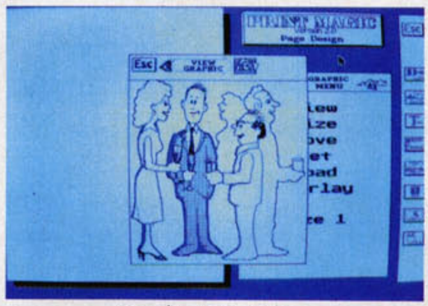
STUDIO OF GREETINGS!: The "Godzilla" of computerized greetings supplements, this large and heavy package features 400 new graphics that not only work with *Print Shop*, but can be exported as .PMG, .PCX and .BMP files as well. The software also includes



Home Alone



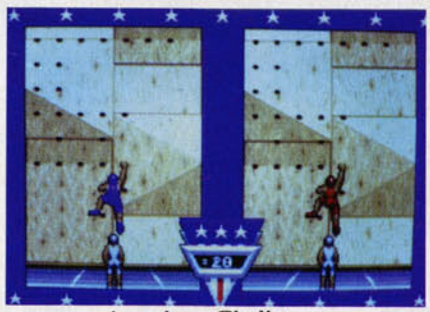
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Studio Greetings



Rock A Doodle



American Gladiators



Global Conquest

the *Print Magic 2.0* program, complete with its own fonts. A huge tome with 700+ samples cards (organized by occasion) and documentation for using *Print Magic* and painting custom graphics oneself. While some stationery rounds out the package, this product is striking as the perfect gift for those who love *Print Shop*. IBM ($69.96). Circle Reader Service #8.

Gametek
2999 N.E. 191st Street, Suite 800
North Miami Beach, FL 33180
(305) 935-3995

AMERICAN GLADIATORS: It was only a matter of time before someone licensed the tests of strength, skill and dexterity that is the hit TV show *American Gladiators*. With a "true to TV" feel to it, this package contains a series of pressure-packed arcade games modeled after the events on the show: The Joust, The Wall, The Assault, Human Cannonball, Atlasphere, Powerball and The Eliminator. Once past the handsome hulks and burly blonde babes on the cover, the digitized sound and 256-color VGA take players right into the game and the documentation (complete with athlete photos and bios) plugs one right into this snazzy little joystick buster. IBM ($49.95). Circle Reader Service #9.

Ibis Software
San Francisco, CA
(415) 546-1917

INTERLUDES NOTEPLAY: Designed primarily for keyboard players (as opposed to "keyboard typists"), users select skill levels and the program "composes" exercises. Trying to beat the clock and rack up a high score is only the subtext to the real lessons in reading and playing notes. Featuring melodies, intervals and chords, having a MIDI-keyboard and compatible soundcard are recommended.

INTERLUDES RHYTHMPLAY: Billed as an "arcade-style game with music education in mind," players work on the basic sight-reading skill of rhythm reading in an interactive setting. Beginning simply with rhythmic


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phrases using only quarter- and half-notes in 4/4 time, difficulty progresses up through six different levels to sixteenth notes, dots and ties, changing meters and playing two phrases with two hands simultaneously. Naturally, a sound card and a MIDI-equipped keyboard are highly recommended for use with this software. IBM ($49.95). Circle Reader Service #10.

Impressions
c/o Merit Software
Dallas, TX
(800) 238-4277

COHORT: This "do it yourself" ancient battles kit pits the hypothetical red and blue forces against each other to wage miniatures-style warfare. While players can recreate classic battles of antiquity, they can also design their own tests of wills. Played in real time, armies and terrain can both be user-defined for custom-built scenarios and casualties and morale can quickly be checked with a click of the mouse. While gameplay was emphasized over realism, this arcade wargame has its own sort of charm. IBM ($49.95). Circle Reader Service #11.

THE FINAL CONFLICT: While tacitly a game of "power politics and global warfare," this is *not* the product that "real wargamers" have been waiting for. A cross between a poor man's *Command HQ* and the old arcade classic *Missile Command*, it lacks much that is "state of the art" and the quasi-legible typeface only exacerbates the problems. Clearly, this game wasn't released. It escaped! IBM ($49.95). Circle Reader Service #12.

MERCHANT COLONY: Akin to the classic boardgame *Imperialism*, the player assumes the role of a Liverpool financier who is out to build a merchant empire. While one can easily amass a fortune by trading the myriad of different goods between ports, most of the fun is to be had by recruiting the various types of colonists and "planting" them around the four corners of the globe. *Merchant Colony* is played in real-time and features documentation closer to *Punch* than the *Financial Times* in terms of usefulness. IBM ($49.95). Circle Reader Service #13.

Lucasfilm Games
San Rafael, CA

HE-162 VOLKSJAGER: The third of four "Tour of Duty" expansion disks for the *Secret Weapons of the Luftwaffe* game, this aircraft (nicknamed the "Salamander") never saw service in the actual war, but will now. This package contains the standard eleven missions (three in flight school and eight historical), a tour of duty and a mission builder. This is a remarkable aircraft because it was made "on the cheap" by the starving German economy and designed to be flown by inexperienced pilots drafted from the Hitler Youth. IBM ($29.95). Circle Reader Service #14.



Cohort



The Final Conflict



Merchant Colony



Vistapro



HE-162 Volksjager



Magic Candle II

Microprose
Hunt Valley, MD

GLOBAL CONQUEST: A four-player version of *Command HQ* meets *Empire*, this modem/network game was previewed in the April issue (#93), page 76. IBM ($69.96). Circle Reader Service #15.

Miller Associates
11 Burtis Avenue, Suite 200
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(203) 972-0777
(Products not pictured)

APBA BASEBALL STATMASTER 2.0: Designed to help the type of baseball fan who keeps stats from the printed box scores in the newspaper or by hand during board games, spending a few minutes each day with this program will keep your information organized. It not only prints out all of the traditional baseball stats for individuals and teams, but adds some new and interesting categories of information output derived from your data entry. IBM ($39.95). Circle Reader Service #16.

APBA MAJOR LEAGUE PLAYERS BASEBALL: A deep, deep strategy game of pure skill, difficulty levels can range from introductory to the complexities faced by professional baseball managers. Players take on the role of owner/manager/commissioner, forming leagues, drafting teams, creating line-ups, choosing offensive and defensive plays during games, etc. The years of refinement with the popular *APBA Baseball* boardgame show in this computer rendition's level of statistical detail. Screens are text-based information only and the package includes no sound support, but supplemental disks (available separately for $24.95 each) include the 1930 season, the 1961 season and "old timers" volume 1. IBM ($39.95). Circle Reader Service #17.

BASEBALL WIZARD 2.0: Designed to let



THIS OPPONENT IS PROGRAMMED TO BE CHALLENGING.



this one wants to rip your lungs out.

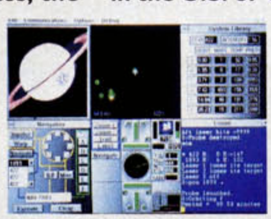
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players not only manipulate the data for the above game, but also tweak the performance ratings (to suit one's own custom leagues better) and game algorithms or create entirely new players with imported statistics. It even lets players play a season along with the actual professional season by creating real-time ratings. This handy tool kit for *APBA* fans is available for the IBM ($39.95). Circle Reader Service #18.

MICRO MANAGER: Designed as an enhancement for the *APBA Baseball* game described above, this makes it an ultra-detailed, advanced simulation designed for complex baseball decision-making. Of course, players can also test out even the wackiest ideas they've ever considered as a baseball manager and can compete against such computer-programmed personalities as Blackie Dugan or Blaise Pascal. Custom "computer" managers can also be created with a vast array of idiosyncrasies. The package also adds enhanced "quick play" functions for faster play of computer-managed games during a season. IBM ($49.95). Circle Reader Service #19.

THE ORIGINAL DUERK'S ELECTRONIC BASEBALL ENCYCLOPEDIA WITH SUPER SCOUT: This encyclopedia (pronounced "Dirk's") gives baseball fans masses of data presented in an easy-to-study form. The complete career records of over 1,000 active players are presented in this electronic database, which will present the information of over 250 statistical fields in a variety of formats. While the presentation of the information may not be instantly intuitive, baseball statistics buffs will quickly assimilate the information and be manipulating it with great glee for many, many hours. IBM ($29.95). Circle Reader Service #20.

Mindcraft
c/o Electronic Arts
San Mateo, CA

MAGIC CANDLE II: Continuing the *CGW* Award-winning series, and previewed in issue #84 (p. 16), this game features an expanded world and spell list. IBM ($59.95). Circle Reader Service #21.

Origin
Austin, TX

ULTIMA VII: As previewed in CGW #87, this Ultima opens the third Trilogy IBM ($79.95). Circle Reader Service #22.

Psygnosis
Liverpool, England

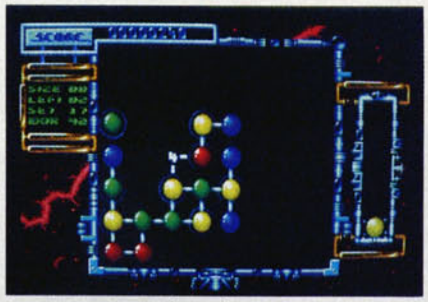
AGONY: In a league with *Altered Beast*, this horizontal-scrolling-game-where-you-die-a-lot offers plenty in the sound and graphics department. As a mystic owl on a fierce flight through six savage levels of graphic gore, the player faces horrendous hordes of hoary harbingers of doom, while seeking enough



Ultima VII



Agony



Atomino



Napoleon, The Campaigns



Vikings



Pinball Dreams

"spells" to work a bit of timely "arcade" magic is the key to player strategy. Amiga ($49.99). Circle Reader Service #23.

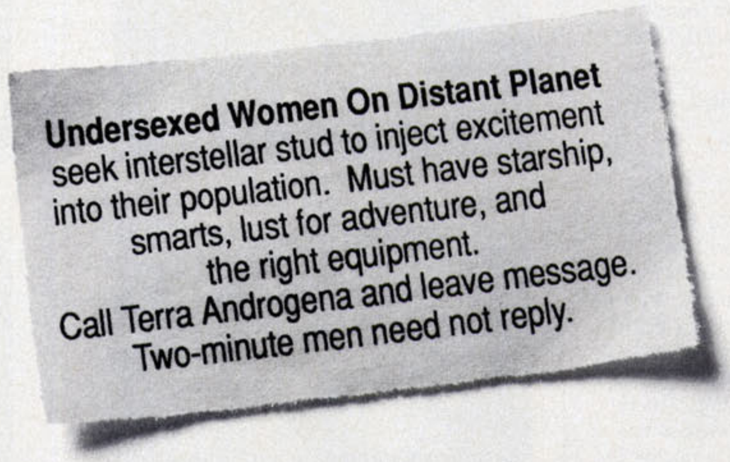
ATOMINO: This molecule construction abstract strategy game will make any player into a mad scientist as they are thrown atoms at random that must fit into a molecular patter (sort of a cross between *Tetris* and *Dominoes*). The trick, of course, is to find atoms with a free electron to share (fortunately, there are "joker" atoms to help lighten the load). Over 60,000 levels should keep the puzzle solvers out there occupied for quite a while. IBM ($49.99). Circle Reader Service #24.

RAW Entertainment, Inc.
3027 Marina Bay Drive, Suite 110
League City, TX 77573
(713) 538-3399

NAPOLEON, THE CAMPAIGNS 1805-1814: This low-to-moderately complex wargame offers players several individual Napoleonic "campaigns" to conduct at a strategic level, while battles can be optionally fought on a more tactical scale (so tactical, in fact, that the information can be printed out so that players can resolve battles using their favorite miniatures rules, with the battle results input back into the program). Four campaigns are included (although none covers the entire 20 years of the Napoleonic era) for one or two players to enjoy. Amiga ($49.95). Circle Reader Service #25.

Realism Entertainment
6N522 Pine Street
Bensenville, IL 60106
(708) 595-7487

VIKINGS: While formally entitled *Kingdoms of England II, Vikings: Fields of Conquest*, this strategy boardgame on a disk is highly reminiscent of Avalon Hill's boardgame *Britannia*. The 1-6 players maneuver a map of 199 territories, incorporating them into their expanding empires over the British Isles. Flotillas, armies, catapults and castle building underscore the basic maneuvers of the seven dif-



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Circle Reader Service #78

ferent troop types, while battle results are tallied before a commander's eyes. These newcomers have put in sufficient style and panache in this, their first major effort, and have created a quality strategy wargame that is well worth looting and pillaging to get (except in Los Angeles, please). Amiga ($59.95). Circle Reader Service #26.

21st Century Enterprises, Limited
P.O. Box 415
Webster, NY 14580
(716) 739-0998

PINBALL DREAMS: A typically European import, this "pinball simulator" will really put a player's Amiga through some paces before his body "tilts" and he calls it a night. With all the quality sound and graphics of a British Amiga import as a high standard to start from, *Pinball Dreams* has taken this a step further with 50 frames/second scrolling. The effect gives a dizzying, yet compellingly watchable, game screen that sports a an addictive little arcade delight. Amiga ($39.95). Circle Reader Service #27.

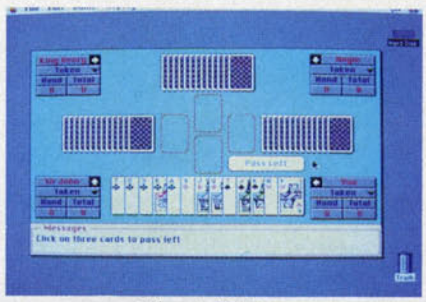
SoftStream International, Inc.
10 Twin Ponds Drive
S. Dartmouth, MA 02748-116
(508) 991-4011

CLASSIC TRILOGY: Like most game trilogies, this one includes three products (grin). The first game is *22nd Street Whist Tutor* (described below). *Cribbage Tutor II* (also described below) makes up the second game, while *Hearts* rounds out the package. The latter game is the one unique game in this package, offering Backward or Nullo variations (in which one wins by losing), plus player-programmed variations. Each game supports full on-line tutorial help for beginners. Macintosh ($79.95). Circle Reader Service #28.

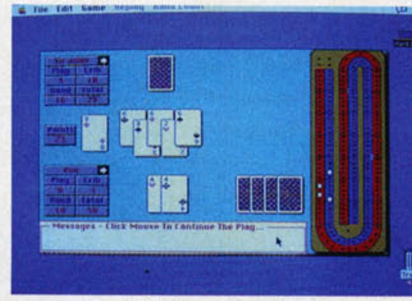
CRIBBAGE TUTOR II: Everything for the computer cribbage player, this game features three levels of play with extensive on-line help for beginners. As an interesting feature, the computer players may occasionally "miscount" their score (as a human opponent might), so you can practice catching "cheaters." Complete with running statistical scores and advice, this is a game worth "pegging." Macintosh ($49.95). Circle Reader Service #29.

FAMILY CARD GAMES: This game features as its center point SoftStream's *MacRummy* program (Described below). Added to the package are three solitaire card games that comprise their *Solitaire DA* product (described below) plus the classic *War* card game, among others. A montage of mix-and-match computerized card games, it is an interesting assortment with a strong tutorial element just made for beginners. Macintosh ($49.95). Circle Reader Service #30.

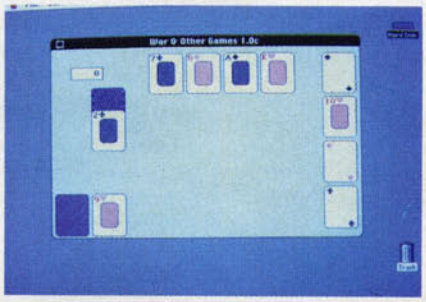
GALACTIC FRONTIERS: The pick of the



Classic Trilogy



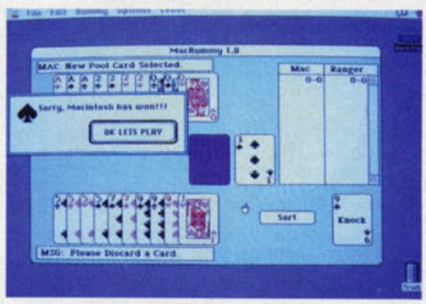
Cribbage Tutor II



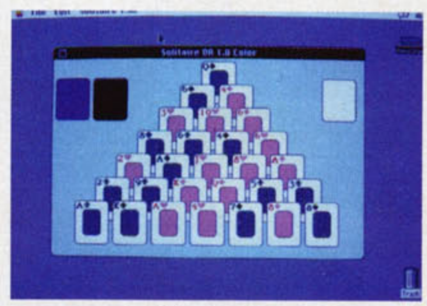
Family Card Games



Galactic Frontiers



Macrummy



Solitaire DA:

SoftStream litter, this one, at least, is not a card game! A strategic space conquest game of the *Reach for the Stars* ilk, *Galactic Frontiers* offers a venue in which two to four human or computer players can compete. Players will appreciate the easy-to-use interface and simple economic model that give this game a fast pace and plenty of replay value for those who enjoy a good "challenge lite." Macintosh ($59.95). Circle Reader Service #31.

MACRUMMY: As a basic computer rummy game (not to be confused with a computer game for "rummies"), *MacRummy* allows players to play two variations of rummy: straight rummy and gin rummy. The clearly written rules and on-line tutorial help will ease beginners into this popular card game (just don't play the computer for money). Macintosh ($49.95). Circle Reader Service #32.

SOLITAIRE DA: Three popular solitaire card games, Boston, Klondike and Pyramid, are available to pop up for a quick solitaire "fix," even while running other programs. Plenty of "cheats" like undo moves and peeking ahead are available for unscrupulous players. Macintosh ($34.95). Circle Reader Service #33.

22nd STREET WHIST TUTOR: Whist is a 400-year-old card game that is the ancestor of modern contract bridge. This particular variation of whist is named after a street in Hermosa Beach, California, where surfers used to play this fast-action, all-or-nothing card game. The program is a gentle teacher, with optional advice and user-defined preferences. Quaint, with a good dose of addictive replayability, hopefully this game will find a greater niche than its pasteboard counterpart. Macintosh ($49.95). Circle Reader Service #34.

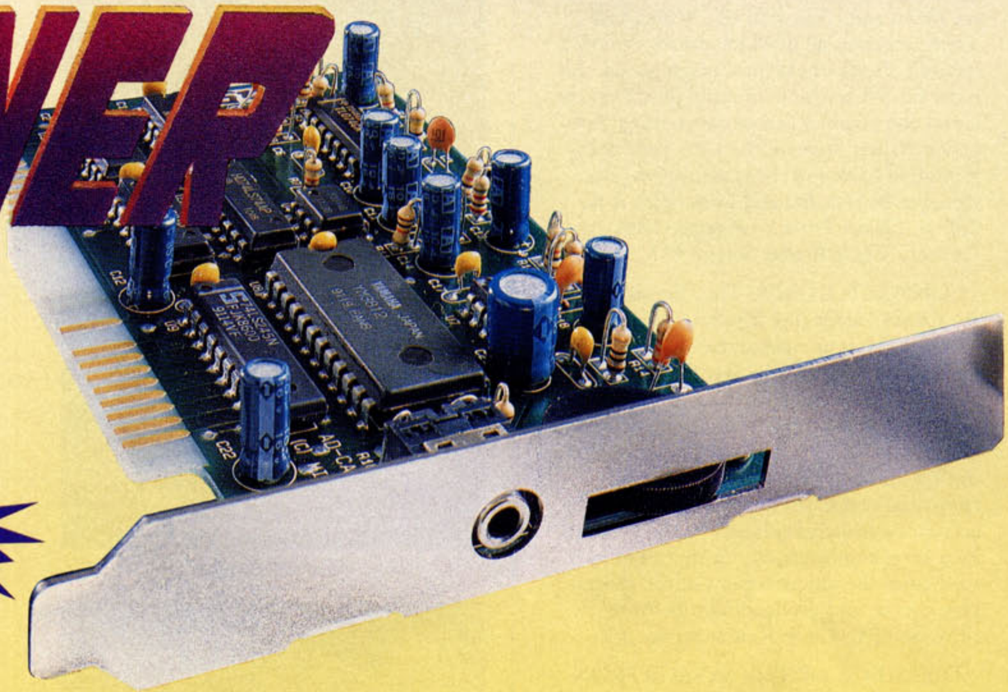
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Circle Reader Service #87

this is veteran game designer Gary Grigsby's masterful redesign of all his Pacific theater wargames. Gary has taken the interface from his "Front" game system (*Second Front, Western Front*) and taken it to sea. With a half-dozen scenarios, all of which can be extended into full, Pacific-theater campaign games, this is the fist SSI wargame to really punch up the sound and graphics end of the package. A superior job was done on the 120+ page documentation book and the gameplay was designed to be kept fast and lively. This is no drill — *Carrier Strike* is on target! IBM ($69.95). Circle Reader Service #35.

CONFLICT: KOREA: This, the second in the *Conflict:* series (the first being *Conflict: Middle East*), is an operational- level, hex-grid wargame of the forgotten war fought in 1950-51 (as seen on all of those *M.A.S.H.* episodes on TV). Four scenarios include two campaign games (one for the mobile part of the 1950s conflict and one for a hypothetical 1990s scenario) and two shorter "phases" of the police action, the Inchon landings and the Chinese Yalu River counterattack. Plenty of special rules cover the unique aspects of the geography, climate and divergent armies involved. IBM ($59.95). Circle Reader Service #36.

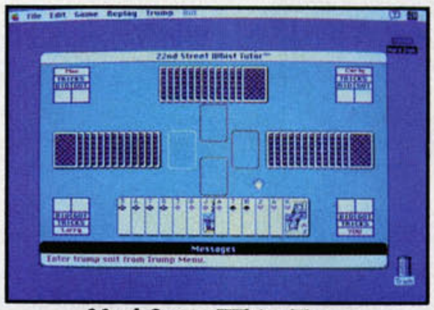
TREASURES OF THE SAVAGE FRONTIER: After walking through the *Gateway of the Savage Frontier*, players will want to know what "*Treasures*" await. Another in the highly successful "gold box" series of AD&D computer games from SSI, this time the Heroes of Azure are off on another jaunt to stop malevolent evil and recover an ancient magical artifact. Weather plays an important (and unpredictable) part in play, and 5th+ level characters from *Gateway* can be transferred over (money and items intact). Interaction with NPCs has been expanded, too (with romantic involvement rearing its, er, head during play). See the Scorpion's Tale in this issue. IBM ($49.95). Circle Reader Service #37.

Synergy, Inc.
Japan

L ZONE: A "busy-bath" style software toy for Macintosh users, players explore a world rendered entirely in 3-D by using nothing more than their mouse. What appears to be a huge underground industrial complex becomes, in effect, *Manhole* for adults with a color Macintosh. CD-ROM. Circle Reader Service #38.

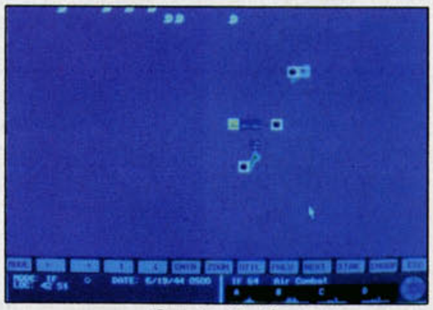
U.S. Gold
San Jose, CA

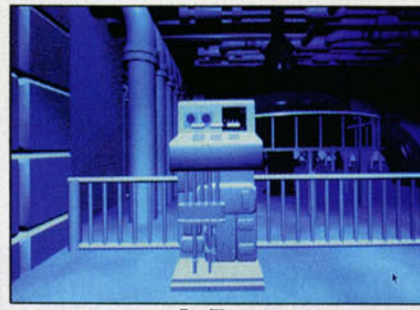
THE GODFATHER: With five levels depicting five scenes from the three *Godfather* movies, this arcade game is another attractive "scroll around and shoot" product imported from overseas. With a heavy licensing tie-in as its major selling point, some "upgunned" bitmap graphics and digitized sound effects add an extra measure of quality in a game that is, essentially, a contrived "Easter Egg" hunt that might have been better left sleeping with the fishes. IBM ($49.95). Circle Reader Service #39.


22nd Street Whist Tutor

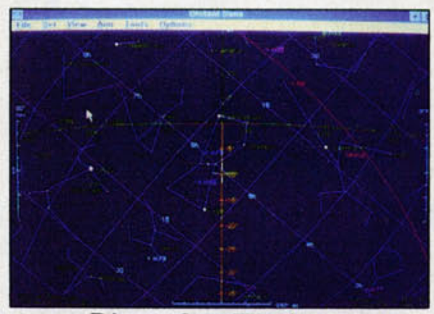


Treasures Of The Savage Frontier


Carrier Strike


L. Zone


Conflict: Korea


Distant Suns Windows

Virtual Reality Laboratories, Inc.
2341 Ganador Court
San Luis Obispo, CA 93401
(805) 545-8515

DISTANT SUNS WINDOWS: An electronic "stargazing" toy, this program, using *Windows*, creates a view of the night sky anywhere on Earth from 4173 B.C. to 10,000 A.D. More than just an electronic planetarium with plenty of features with zooming camera views, it is also part galactic encyclopedia that the user can update by adding thousands of custom objects. Eclipses can be "designed" and maps can be printed to provide custom star charts. As Spock would say, "Fascinating...." IBM ($129.95). Circle Reader Service #40.

VISTAPRO: This "electronic camera" allows one to take "pictures" (capture screens) of all sorts of interesting landscapes. Using a point-and-click interface, 256-color VGA screens can be user-defined to vary in resolutions from 320 x 200 to (for those with VESA graphics drivers) 1024 x 768. Using a 3-D projection system to move polygons and supporting a floating point co-processor (which is not required), lighting, shading, focus, zoom and every other camera trick in the book can be fiddled with. IBM ($129.95). Circle Reader Service #41. CGW

Inside The Industry



Accolade Gets Reprieve in Sega Decision

When **Sega Enterprises, Ltd.** filed a lawsuit against **Accolade, Inc.** on October 31, 1991, observors believed that it was over an issue of monopolistic marketing practices vs. marketing chutzpah. Accolade's principals, having been shut out of the lucrative Nintendo 8-bit market, did not want to miss out on the videogame bandwagon again. Hence, they made the decision to rear-engineer their products and avoid the bureaucratic entanglement of becoming a licensee of another Japanese videogame company. During the first week of April, 1992, U.S. District Court Judge Barbara Caulfield enjoined Accolade from further sale and manufacture of unlicensed Sega Genesis games. Since videogame sales allegedly account for 40% of Accolade's revenue, the decision could be significantly disastrous.

Originally, the injunction was not expected to affect product which was already in the marketplace, but Judge Caulfield followed up her original decision by ordering , on April 13, 1992, an immediate halt of the sale of Accolade's Genesis products and recalling existing stock from the channel. Fortunately, Accolade won a stay of the recall provision of the injunction almost immediately from a federal appeals court. One well-placed source told CGW that the source believed Judge Caulfield had a fundamental misunderstanding of what rear-engineering actually was.

Accolade has received welcome support throughout the trial process from the American Committee for Interoperable Systems (ACIS) which filed a amicus curiae on the litigation. Peter Choy, Chairman of ACIS, stated, "The life blood of the computer industry is the ability of any competitor to make and distribute interoperable software and hardware." The final outcome of the case will depend on how much stock the legal system puts into that thesis.

The Learning Company Goes Public

The Learning Company (NASDAQ symbol **LRNG**) announced its initial public offering on April 29, 1992. The offered price on the 2,000,000 shares was $11 per share and the IPO was fully subscribed (i.e. sold out) at that level. At press time, the per share price had increased to $13.25 per share. The Learning Company, publishers of the veerable Reader Rabbit and *Super Solvers* series of games, has recently moved toward puttng more entertainment value in their product line with their *Ancient*

Empires and *Operation Neptune* edutainment products. The company expects to use the working capital generated by the IPO for developing products for the educational/consumer marketplace by using emerging technologies.

Microprose Fencing Team Edges Johns Hopkins

In February, the **Microprose Strike Eagles** made their fencing debut in a tri-meet between Salle Palasz and Johns Hopkins. The fencing team (from left to right in the picture) of Tim Train (playtester), Lawrence Schick (designer of *Sword of the Samurai*), B. C. Milligan (designer on *F-117A* team) and Doug Whatley (programmer) lost their initial match to Salle Palasz by a 10-6 score, but managed to edge Johns Hopkins 9-7 for their first victory as a club team. Though Milligan and Train are experienced competitive fencers and managed to garner the majority of points for the team, all were impressed with the performances by Whatley (fencing in his first team event) and Schick (fencing in his first competitive bout, ever).



Sega and L.A. Radio Station Raise $250,000 in AIDS Benefit

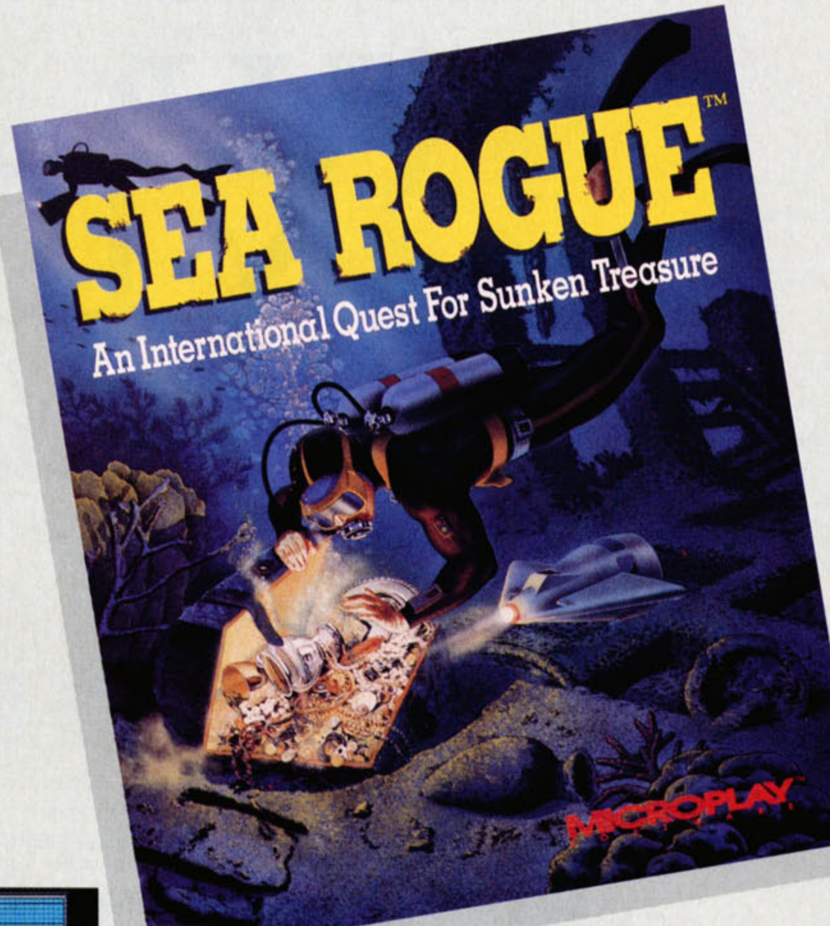
As part of a joint fundraiser between Los Angeles' radio station **KIIS-FM** and **Sega of America**, the two companies sponsored a charity auction and a concert (KIIS and UNITE). At the auction, a guitar autographed by U-2 went for $10,000, Sting's motorcycle raised $7,500, a gold record from Michael Jackson net $4,500. The funds will be donated to Pediatric AIDS Foundation. Artists participating in the concert included: Richard Marx, Amy Grant, Luther Vandross, Keith Sweat, Color Me Badd, Kenny G., Eddie Money, andWilson

Carmen Sandiego Becomes a Board Game

Broderbund Software has entered into a licensing agreement with **University Games** in which the latter company will develop and market a board game based on the popular computer game character. The game will be designed for two-to-six players and will be targeted at children aged 10 and older. The expected retail price of the game, to be entitled *Where in the World is Carmen Sandiego?* will be $19.99.

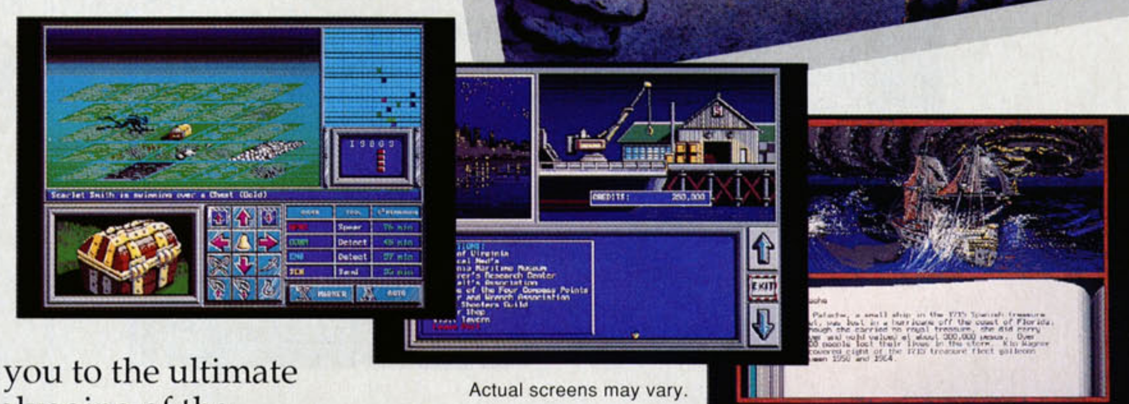
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Actual screens may vary.

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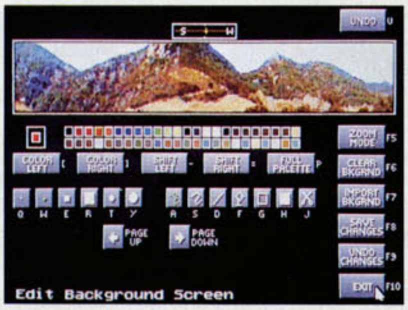
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Golf Game Handicap.

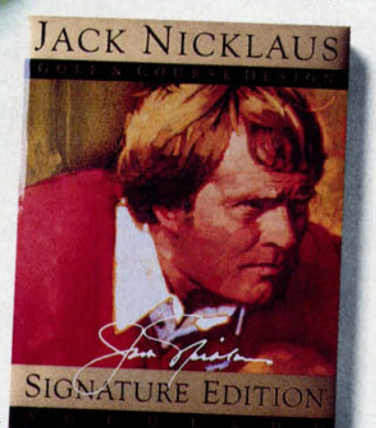


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Circle Reader Service #45

Have You Seen Me?

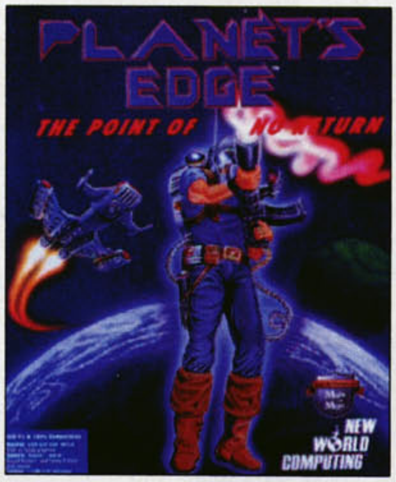
Missing: A 4 billion year old blue-green planet of medium build, slightly bulging about the midriff. Last wearing dainty white caps about her top and underside and one small, nondescript gray moon. Home to several billion ape-descended life forms (and a near equal complement of digital watches). Answers to the name of 'Gaia'.

Last seen: Orbiting Sol at approximately 93 million miles conversing with an alien machine of unknown origin and purpose.

Thus is the stage set for New World Computing's space opera Planet's Edge, and yet another of mankind's classic quests to save itself and its planet. As one can gather from the ad above, the Earth is missing...in an odd sort ofway. It seems an alien artifact of unknown origin has somehow removed the earth's mass, leaving behind the other (usually) concomitant properties of matter. Also spared was the Earth's orbiting (what?) moon, which now becomes the base from which role-players lead a group of four humans in a "Save The Planet" rescue mission of epic scale.

In Planet's Edge, the New World design team, most noted for their Might & Magic role-playing series, has transporting their role-playing talents from the fantasy setting to a futuristic venue, bringing with them their penchant for huge game environments and challenging puzzles. A quick peek at the game map, which beautifully displays 100+ star systems ofup to 10 planets divided into an eight part pie graph of space, reveals just how big this game is. The player will end up visiting each of these estimated 500+ planets in gathering the chunks of the Penultimate Puzzle that will lead to the recovery of Earth's missing mass to its proper location in space-time.

As players follow the game's trail of crumbs, they find themselves involved in a series of planet-side mini-adventures re-



sembling StarTrek episodes in style, and MegaTraveller or Ultima V in graphic look and feel. Each inhabited planet has its own story to tell (which, of course, ties more or less with the overarching plot), is populated by different alien races, and sports a distinctive graphic style and theme music. These well-written and designed scenarios form the core of the game. For the most part, solving these sub-adventures is a matter of object juggling (get the Fnord Converter from this alien and give it to another in exchange for the Frobozz), though there are several more interesting puzzles involving cryptograms, logical deductions, and other original teasers, some of which are quite challenging. Combining the level of these puzzles with the daunting number of objects to be swapped around, and one can safely predict that the average gamer will need an adventurer's support group, a clue book or a friendly QA person (in my case), to complete the game.

Though the bulk of the game is made of these mini-adventures, there's more to Planet's Edge than the 3/4 perspective, over-head adventuring. This space opera has several other parts that serve to connect and round out the whole. One such,is an element of exploration and trade. Players must build their own spacecraft, ship weapons, armor and hand weapons using a number of basic elements discovered throughout the game space. These elements must either be mined from appropriate planets or traded for with alien merchants. A substantial portion of the game, then, involves searching the game space for the necessary elements, gathering them together in sufficient quantity, and stirring up that technological magic to create Items of Great Power.

While traveling throughout the stars, one often encounters various alien ships of differing dispositions. Some aliens are friendly and will offer to trade goods or information; others will attack the player on principle. If attacked, the player's ship enters an action sequence closely resembling that of Starflight or Star Control in which the opposing ships dodge and weave in a furious exchange of lasers shots, missiles and other pointy-ended projectiles. Though essentially a twitch and flex system (there are auto-pilot and auto-firing mechanisms available, though they are pretty useless) there is actual quite a bit of strategy involved in both the player's battle style against different enemies, and in the outfitting of the player's ship for different circumstances.

All of these game elements come together to create a tight, engaging balance. The adventure packets are neatly separated by periods of exploration, ship-to-ship combat action, and trade, creating a playable, flowing rhythm.

Under The Hood

Looking at the nuts and bolts of the game's 'role-playing' mechanics one finds familiar guts with a few added subtleties that bear the mark of design minds with a rich pen and paper RPing history. Players are given four pre-made characters with preset names, personalities, basic characteristic ratings and a set of skills. The lack of personalized characters was a bit disappointing at first though I grew into this design decision as I played along. The preset characters allowed the design to create rich character histories

Continued on pg. 28

GREAT WAR PLANES™

FROM THE SMOKING RUINS OF PEARL HARBOR IT BEGINS...

A★C★E★S OF THE PACIFIC™



VGA/COLOR MACINTOSH

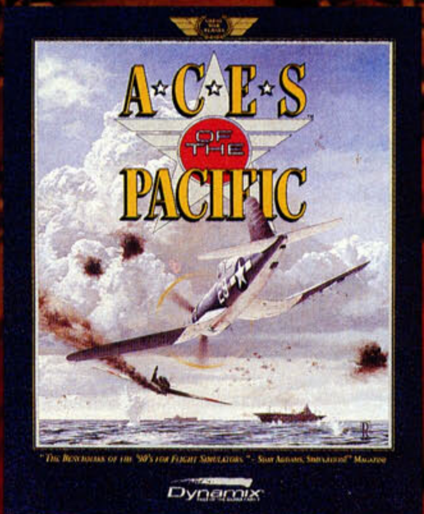


VGA/COLOR MACINTOSH

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- Fly for either America or Japan, experiencing the sights and sounds of air combat in the Pacific: Carrier deck landings and take-offs, torpedo dive bombing, mid-air explosions and billowing clouds of smoke.
- Play a quick single mission or enlist for the full tour between 1941 and 1945.
- A powerful Mission Recorder lets you save an entire mission to disk and then jump back into the simulation at any point to begin playing again!
- A magnificent 240 page manual, complete with a detailed historical overview of the war, photos, war maps, pilot profiles, air combat tactics of the era and over 25 color pages of aircraft illustrations.

A Damon Slye SIMULATION



Circle Reader Service #92

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Shay Addams, Simulations!™ Magazine

"Aces of the Pacific is to Red Baron what the Corsair was to the Fokker Tri-Plane"
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Acid Gun	Beam	3	Lt Wpn	6	6	2
Assault Laser	Beam	2	H Wpn	8	4	4
Assault Rifle	Proj	1	H Wpn	2	10	5
Atomizer	XRay	5	H Wpn	4	20	5
Battle Laser	Beam	3	H Wpn	10	3	4
Blue Quark	XRay	5	H Wpn	20	4	5
Breech Missile	Proj	2	H Wpn	5	3	12
Chain Sword	Hand	1	Hand	6	4	1
Cygnus Cannon	XRay	6	H Wpn	30	4	2
Dagger	Hand	1	Lt Wpn	1	8	1
Death Ray	XRay	7	Lt Wpn	200	2	5
Defense Wave	XRay	4	H Wpn	20	1	0
Electron Gun	XRay	2	Lt Wpn	3	5	1
Energy Mace	Hand	2	Hand	7	3	1
Grenade Launch.	Proj	1	H Wpn	1	8	3
Hand Laser	Beam	1	Lt Wpn	2	7	4
Imastyl	Hand	1	Hand	1	8	1
Laser Rifle	Beam	2	Lt Wpn	2	11	5
Laser Sword	Beam	3	Hand	8	3	1
Machine Gun	Proj	1	H Wpn	6	5	4
Mass Cannon	Proj	4	H Wpn	50	2	5
Micro Injector	Proj	5	Lt Wpn	6	12	2
Mono-Mol Disk	Proj	3	Lt Wpn	1	30	3
Needler	Proj	2	Lt Wpn	2	6	3
Neutron Gun	XRay	3	Lt Wpn	6	4	3
Pistol	Proj	1	Lt Wpn	1	12	3
Plasma Bow	Proj	3	Lt Wpn	5	10	1
Plasma Gen.	Beam	6	H Wpn	10	3	3
Rifle	Proj	1	Lt Wpn	2	7	4
Rocket Launch	Proj	1	H Wpn	10	2	5
Scroe Special	Beam	1	H Wpn	1	1	4
Seeker	Proj	2	Lt Wpn	5	4	5
Smart Gun	Proj	2	H Wpn	20	1	5
Sossee Dagger	Hand	9	Lt Wpn	8	2	255
SubAtom Blast	Ray	4	H Wpn	12	4	2
Super Laser	Beam	3	H Wpn	10	6	4
Sword	Hand	1	Hand	2	8	1
Tac Nuke Rifle	Proj	2	Lt Wpn	8	8	5
Thermite Launch	Proj	1	H Wpn	3	7	3
Turbo Laser	Beam	3	H Wpn	7	5	3

A catalog of the universe's hand-held destructive possibilities. Note that individuals using weapons for which they are not trained are generally dangerous to any one/thing within the weapon's range.

Bulwarks From Bodily Harm

Name	Protects Against	Tech Level	Points to Destroy	Points to Breach
Adamantine	Chain Hand	1	200	20
Assault Suit	Beam	3	500	30
Chain Mail	Hand	1	120	10
Ceramic	Beam	2	200	12
Composite	Proj	2	400	16
Dreadnought	Beam	5	25600	50
Evian Armor	Beam	3	500	20
Flak Jacket	Proj	1	120	10
Leather	Hand	1	60	4
May Field	XRay	3	1000	30
Modu Armor	XRay	3	400	24
Personal Shield	XRay	3	200	15
Plate	Hand	1	320	16
Recon	Proj	1	150	15
Reflec	Beam	2	100	10
Shielded Reflec	XRay	2	500	25
Teflar Suit	Proj	2	320	20
Wet Suit	Hand	1	80	1

Note that each piece protects against a specific form of attack, and is pretty useless against any other.

Shipboard Projectiles

Type	Damage
Cannon	1
Mass Driver	2
Rail Gun	4
Rack Gun	8

Note: A projectile's chance to hit is based on the captain's projectile skill with a 5% decrease for each point of range. Damage does not decrease with range.

Shipboard Lasers - Range

	0	1	2	3	4	5	6	7	8	9+
Laser	2	2	-	-	-	-	-	-	-	
X-Ray	4	4	2	-	-	-	-	-	-	
Mega	8	6	4	2	-	-	-	-	-	
Quark	16	16	14	12	10	8	6	4	2	

Note: Number is amount of damage. A laser's chance to hit is equal to the captain's beam weapons skill with no decrease due to increasing range.

Shipboard Missiles

Type	Damage	Seeker	Speed
Missile	3	No	10 + Ship's speed
MIRV	6	No	9 + Ship's speed
Super	12	Yes	8 + Ship's speed
Mega	24	Yes	7 + Ship's speed

Notes: Missiles run on a limited supply of fuel which runs out quickly. There is no range adjustment on the amount damage inflicted. Using them requires no skill on the captain's part (though it does require 'arcade' skill on the part of the player).

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(fleshed out in character dossiers in the documentation), and took away some emphasis from the numerical aspects of a character in favor of his or her personality. Besides, I soon discovered that the 'roll'-playing aspect was still present in the game's cloning system. Should a character happen to die, he or she can be 'cloned', wherein his or her basic stats and skills are re-shuffled. Characters can be cloned continually until he or she has the stats and skills the player desires.

The character skills range from weapon skills, to space craft skills, to leadership and diplomacy, and each has an interesting effect on game play. These effects are not mentioning in the documentation and are subtle enough that they would have remained hidden from me if I did not have a New World QA person explain them to me. For instance, the Leadership rating will add 1-10% to each characters "to hit" percentage if the Leader is heading the party prior to combat. If the pilot has an Astrogation skill of 90+ then 1 point is added to the ship's top speed. Communication skills aid in negotiating with alien traders. Computers can be useful in several of the planet-side adventures. More obvious, is the fact that the pilot's ship weapon skills and each individual's weapons training effects their 'to hit' rating in combat. In fact, a character using a weapon for which he or she is not trained can be more dangerous to their own party than the enemies they are firing at. Again, these things are not mentioned in the documentation and would have, for the most part, gone overlooked if they had not been pointed out.

The design also does some interesting things with armor and weapons. Whereas in most CRPG's weapons all do a general amount of damage, and armor generally protects against all forms of attack, in Planet's Edge things are a bit more interesting. There are several different types of weapons one can use and corresponding armor types to protect against them. Thus, when enters a battle, it is necessary to discern what the enemy is using against the party and re-outfit the characters for the occasion. Unfortunately, players must guess at the effectiveness of a piece or armor or weapon as, again, the documentation is lacking. (Guess no more! See the nifty charts included with this article).

The Dark Side of The Moon

Unfortunately, Planet's Edge is not one of the smoothest rides I've taken around the western arm of our galaxy. The game contains a number of hitches, glitches, and bumps without which it could have been considered a stellar effort in more than the immediate sense. Though not fatal, in any sense, these 'irregularities' jar one just enough to draw attention away from the scenery and onto the road.

Looking back now, these little nui-

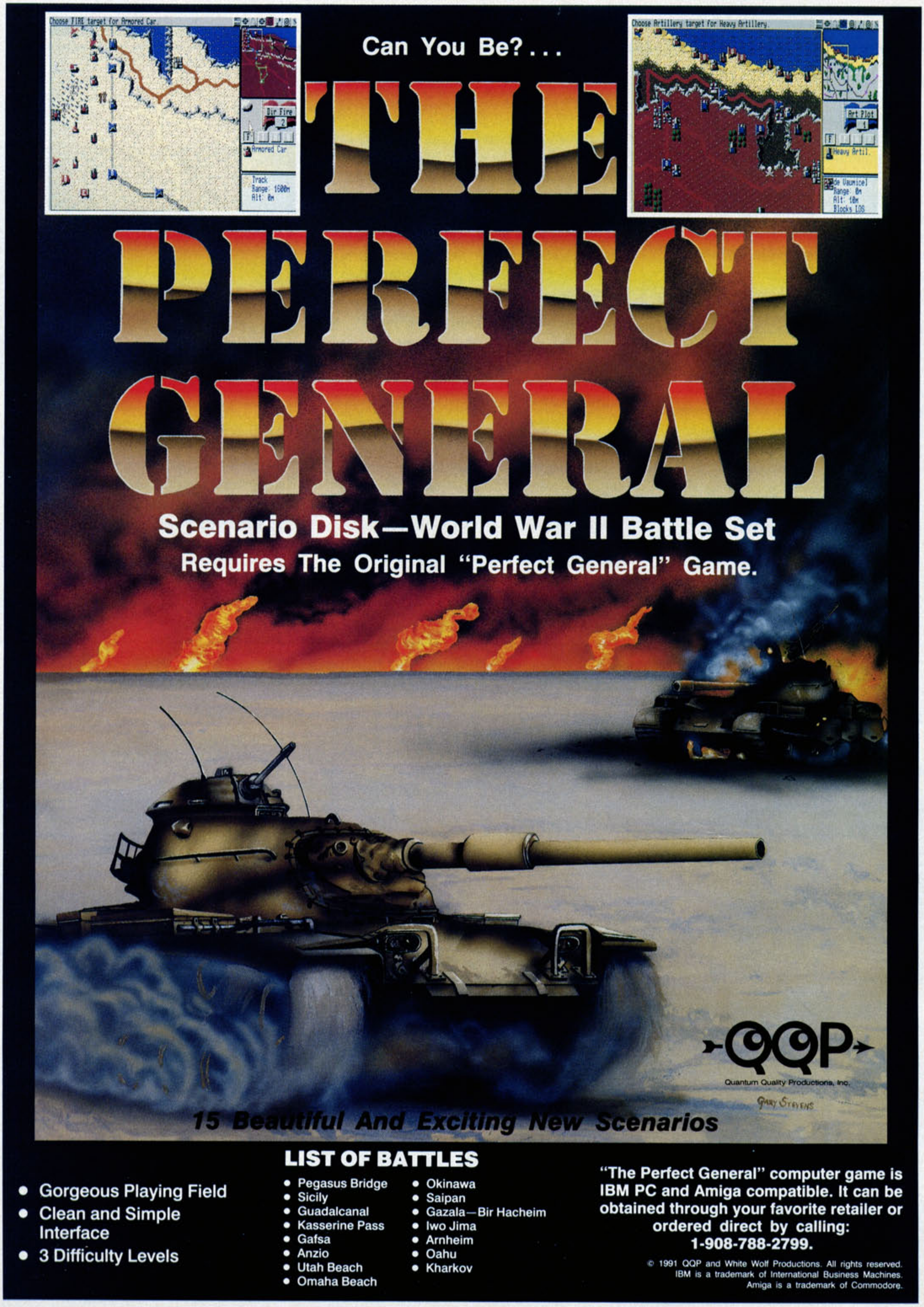
sances come to quite a list. For one, there are a number of typos, grammatical errors, and small inconsistencies in game text, which are perhaps understandable with a body of text so large, though they tend to leap right out and prod at a player whose eye is trained four such screwtiny grin. There are problems with the ship's auto pilot mechanism which often cause the ship to clumsily miss its target and occasionally vibrate madly as if vacillating between one direction and another. More important is the problem with the Commander's messages at the moonbase, which often flash by before the player can read them. These messages are the game's primary method of guiding players through the 'optimal' game path. Of the more irritating variety are the problems with doors which may slam upon a character and lock him or her inescapably into room, or the fact that a friendly NPC will often turn against the player's party if accidentally caught in the middle of a battle with other hostile NPC's, leaving one no choice but to blast it (this can be especially distressing if that formerly friendly (and formerly alive) NPC was the source of an important clue). Finally, when making contact with an alien ship there is no option to flee/retreat from an engagement, even if the alien simply warns one to leave the sector. There are only two types of aliens, good and bad, and the player is forced to always attack the bad.

As I've said, these knocks and pings aren't so bad as to sink this game but are bothersome enough to mention. This product could have really shone, but for a little extra QA effort.

Final Countdown

Stepping back and viewing the entire package I see a solid, charming game with a few lumps in the dough. Though I did find a thing or two to grouse about and few things that I had to 'learn to live with', I enjoyed the game quite a bit. The graphics aren't state of the art (though they may have been 2 years ago when this project was started), and the interface is not the cleanest, yet the colorful sub-plots and variety of game elements, along with the nuances in the game mechanics seem to save it from its untidiness. There's a rich story, good play balance and many hours of game play here. CRPG'ers should find a lot to like. CGW




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RUMORS

Impressions, the British software company, is planning to release *Conquest of Japan* in the U.S. during August. The wargame features their miniature-level system and allows players to conquer the main island of Honshu.

Mindcraft is planning to publish Mark Baldwin's *Legions of Krella*, a planetary invasion game similar to the sections of **Interstel**'s *Star Fleet II* that were impossible for most players to access.

On Columbus Day, commemorating the 500th Anniversary of Columbus' journey, a brand new *Seven Cities of Gold* will be released with a new interface and gorgeous new graphics.

The successor to **Strategic Simulations, Inc.**'s Gold Box series will take place in TSR's *Dark Sun* universe. The graphics and animation present an entirely new look for the role-playing series. Rather than trying to emulate their successful Black Box series, the design team has opted to create a game with the traditional overhead perspective which offers plenty of graphic chrome in beautiful tile sets for the terrain and intriguingly animated monsters for the animation. The new game is expected to be more skill-based than the earlier Gold Box series.

Casino Craps, the popular Shareware program has been reworked with new features added. The new incarnation of the game will be featured in **Villa Crespo Software**'s *Coffee Break Series*, the new budget-priced line mentioned in last issue's "Rumors."

Fans of **Accolade**'s *Winter Challenge*, the multiple event action game based on the Winter Olympics, will be interested in *Summer Challenge*, the anticipated sequel based on, of course, the Summer Olympics.

Three-Sixty Pacific is alleged to have scrapped the original storyline/campaign for *Megafortress II*. The story, based mainly on espionage and international crime, was absolutely so implausible that the publisher ordered the design team to start over. The good news is that players will be able to fly accurate flight/performance models of B-1 Bombers that were designed, but never manufactured. Three-Sixty is working closely with the defense contractor to develop the most accurate possible simulation based on unclassified materials. CGW

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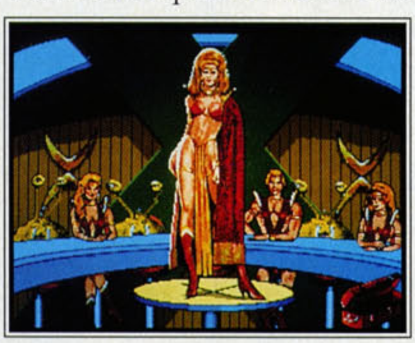
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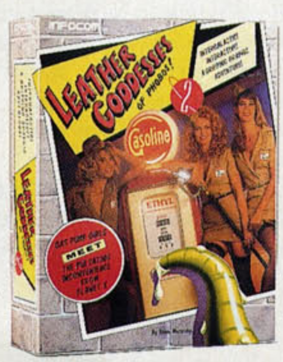




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Microplay's Sea Rogue

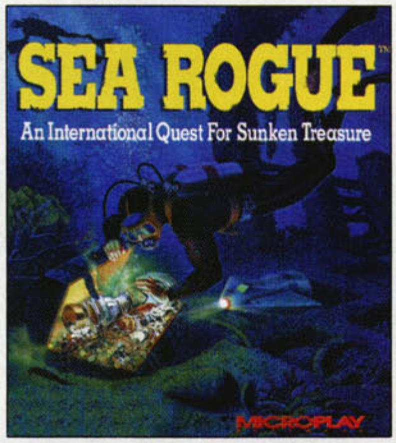
by Gary Jay Levine

TITLE:	Sea Rogue
SYSTEM:	IBM
# PLAYERS:	Solitaire only
PRICE:	$49.95
PROTECTION:	Document Look-Up
DESIGNER:	James R. Jones III

Whether one is from the *Sea Hunt* or *Jacques Cousteau* generation, the siren song of ocean depths lures our imaginations into mysterious realms that are out of most of our "leagues." *Sea Rogue*, published by Microplay, makes available to the would-be fortune hunter over 270 actual shipwrecks spanning ten centuries. Gold, silver, jewels and the like can be reaped from wrecks ranging from Viking ships and Spanish galleons like the *Maravilla* to the modern day *Bismarck* and *Titanic*. As captain of a crew of six, the computer gamer assumes overall responsibility for such tasks as researching, searching, surveying, recovering and actually identifying shipwrecks during the treasure hunting process. *Sea Rogues* allows players to sail the high seas from the Gulf of Mexico to the Carribean Sea and across the Atlantic Ocean. Over 18 ports of call include Dublin, Lisbon, Casablanca, Dakar, Boston, Miami, Bermuda, etc.

Charting the Course (Mechanics)

The path to glory begins with the player assuming command of a rickety trawler, an inexperienced crew and a minute amount of funds. The crew (with gender choice) consists of weapons/diving, sensor, navigator, communication and engineering officers. All have various functions and a point system that rewards the player/commander for successful finds. With these experience points, one can improve each crewman's skills at training centers in port. Then the dollars accumulated from sale of treasure enables one to trade in for a research vessel and, ultimately, buy the high-tech deep water submarine for which the game is named, the *Sea Rogue*. Depending on port locale, optional wreck hunting, diving, weapon and high-tech black market equipment can also be purchased. Ever important clues and treasure maps for locating wrecks can be found in libraries, research



centers and the seafarer's favorite, the local tavern.

Naturally, diving for wrecks is the main thrust of the game and the most interesting facet of the game. When searching old wrecks in shallow water, one is allowed to control four divers individually, as well as the equipment they carry. This gear includes magnetometers, trowels, sand suckers and, as one would hope, knives/spear guns for ever present sharks.

Mindful of the remaining oxygen supply, players are afforded the opportunity to fully maneuver their divers on three axes. Divers can search through five layers per ocean "square" uncovering cannon, coin, chests and — be forewarned — the occasional mine. It is also possible to grab or hoist and position flag markers to mark one's path for the ensuing trips below. A detailed map overlay can be brought to view to give the player a layout of any wreck sites, diver locations and uncovered items that have been revealed to the team at any given time. For modern wrecks in deep waters, the *Sea Rogue's* underwater probe (remotely controlled by the player) moves through various levels, stairs and rooms. With the attached claw, one can torch safes open or attempt to "crack" the lock. At the same time, the wise player will remain aware of the currents, battery drain and potential for being closed in by cave-ins. The probe searches are the best part of the game.

In game terms, players choose one of three options to set the tone of the salvage operation. These range from rapid (automatic grab-all) to painstaking (manually searching square by square). The player's choice will not only affect the value of the haul, but international relations and the ship's bell identity clue, as well. Wise players will remember that identification of wrecks, not dollars gained, leads to the highest overall scores.

There are three levels of difficulty in the game. No matter which level one chooses, however, one must compete with up to five other hunters to locate/identify wrecks and recover treasure. "Newspaper" articles announce the success of the computer-controlled competitors. These levels are mainly defined by how much combat the player is likely to encounter from seagoing traffic. Such traffic includes military forces, drug and pirate vessels, as well as "Evil Eddy's" ships,- one's toughest competitor. This occasional combat ranges from ship gun engagements to full - blown sub combat. For those who don't desire this combat action, the novice level offers the complete game without it and all wrecks available for salvage/recovery.

Other game features include detailed area maps with zoom, variable weather, fine interface, save game and an editable Captain's logbook. In addition, for ease - of - play, the game offers the purchase of automatic wreck and treasure map identification, instant safecracking and encoded message deciphering. Players wishing for



more realism and challenge should "pass" when given the option of purchasing these goods.

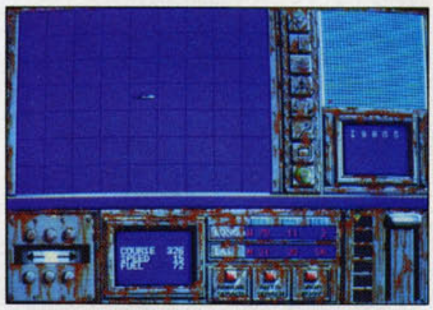
Marker Buoys (Documentation)

The 160 page manual is split into two parts. One is a decent description of game play/tips. However, the explanation of skill and experience points is confusing along with the probe screen. Tip: the "lightning" icon for the claw control of the probe does nothing. It was originally intended to zap deep sea monsters but, thankfully, the publisher demanded their removal. The other half starts with actual documentation of wreck hunting procedures. This is followed by the "Historical Wreck Manual." This painstaking effort is a fairly accurate representative picture of all the shipwrecks in the game. These are categorized by country with ship name, date of sinking, manifests and a brief history. Aside from its obvious importance to the game, its a worthy educational experience as well.

Scavenged Wrecks (Disappointments)

Unfortunately, one does come up with a few empty chests in overall play. *Sea Rogue* attempts to be a jack of many genres in simulation, role-playing and action/arcade. Sadly, it masters none, resulting in insufficient variety for repetitive play. Role-playing interaction in all ports is reduced to check this and buy that. In addition, the simulation of shallow diving operations lacks sophistication, the search and recovery phase should have dollar costs attached so that each would have become more of a financial risk. The lack of balance engendered by the latter becomes apparent when players discover that one good find enables them to purchase virtually everything in the game.

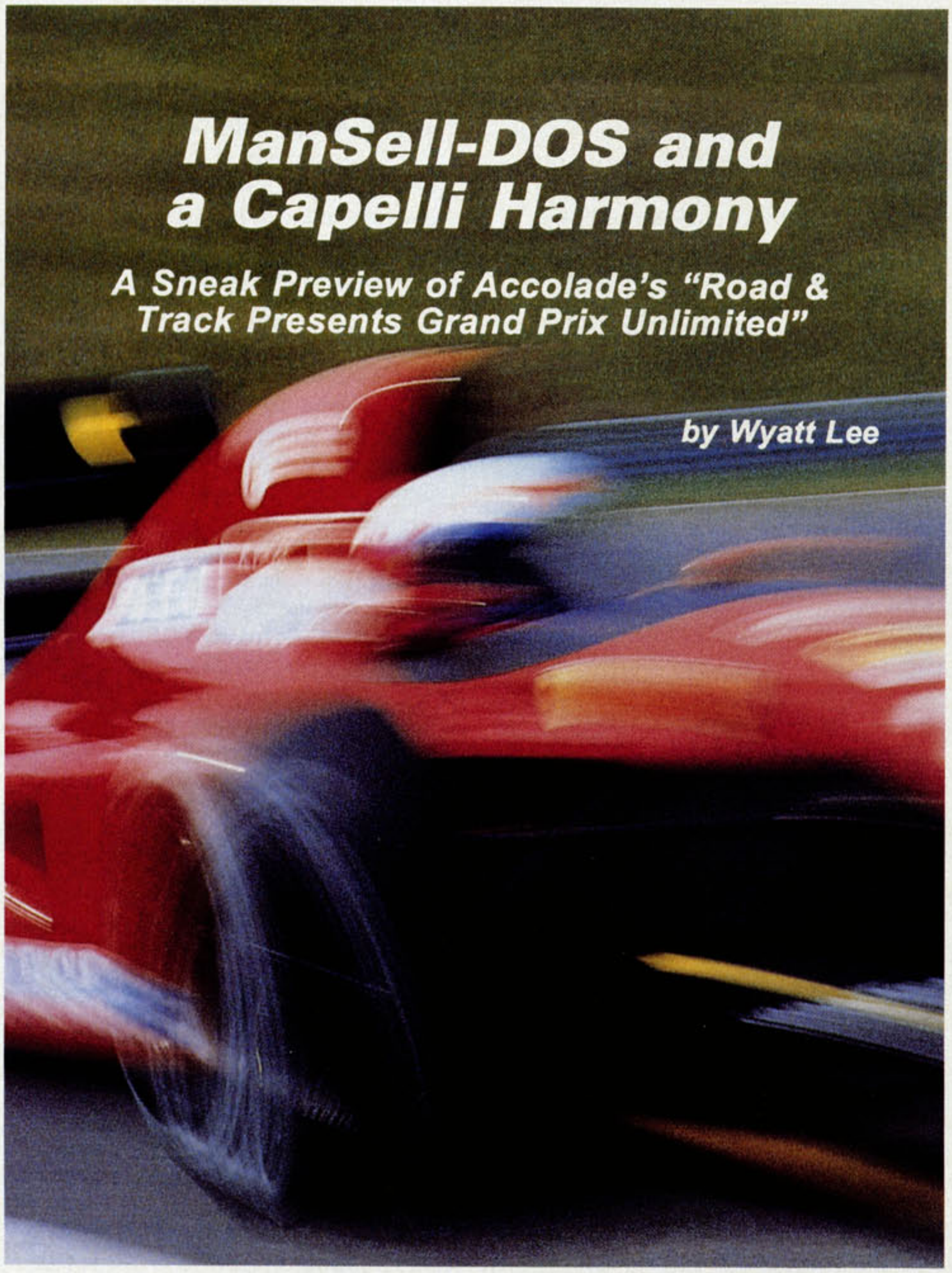
Combat action turns the mini-sub into a quasi Los Angeles class attack sub with ADCAP torpedoes and decoys. While



combat may provide an enjoyable interlude, purists would certainly wish for more depth in role-play and simulation aspects. At times, one wonders where the size of the game went to (8+ megs hard drive space) with its somewhat simplistic graphics, animations and sound effects. One gets the feel of a late '80s style game released in 1992.

Newspaper Clipping (Conclusion)

As it stands, this game may not appeal to those who demand current state-of-the art in their gaming nor to those seeking the definitive Jacques Cousteau-style underwater recovery simulation. That stated however, there is enough offered to attract those who would enjoy the lure of the deep, the challenge of finding sunken wrecks and the thrill of recovering buried treasure. In the tradition of the famed *Starflight* series, *Sea Rogue* provides do-as-you-wish game play choice in its vast open-ended underwater world. Software Sorcery, in their first design effort, offers long term play value in a fascinating subject area. CGW



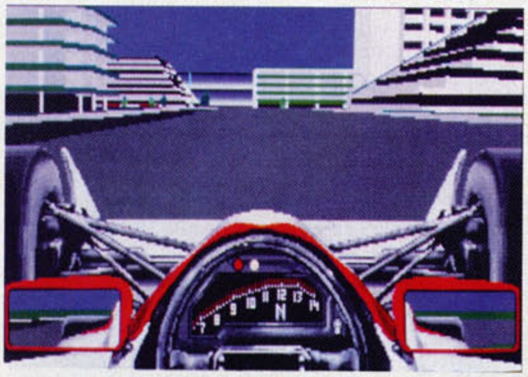
At first, Formula I sounds like it has more to do with chemistry than automobile racing, but Formula I racing is, simultaneously, the glamorous international showcase circuit of the jet set and the glorious exposition of cutting-edge automobile technology. It features the deception of placing high-powered, four-wheeled technological analogs to high-performance aircraft on ordinary city streets (only *this* time, the wings are to hold the vehicles *to* the ground instead of lifting them from it), cruelly allowing mere mortals such as ourselves to identify with the world's finest drivers as they play the ultimate game of chicken with curves, walls, hay bales and rival vehicles.

The last time I attended a Formula I event, I saw Nigel Mansell and Niki Lauda move from deep in the grid (order of start, based on qualifying times) up to a first and second place finish, respectively. I watched the world's greatest drivers trying to hold the best lines as they pushed their machines to the edge and shook my head in stupefied wonder as some cars were set so low to the ground that they generated sparks as they flew over one particular (and oft complained about) bump at the end of one straightaway. As turbines whined and the blurs of color passed my position, I wondered if those drivers felt suspended in time, captured in a cocoon of speed that would thrust them newborn into a hostile environment as the comfort of the straightaway blended into the horrifying (but stimulating) danger of the next curve.

The last time I *experienced* Formula I was when I accelerated over a hill during the Italian Grand Prix at Imola and looked down at the double "S" curve I was plunging toward. Well, it was a *vicarious* experience in **Accolade**'s *Road & Track Presents Grand Prix Unlimited* (*GPU*), but it was an exhilarating experience nonetheless. Tom Loughry (the man who first put us inside an M1 Abrams tank in *Steel Thunder*, took us back to Vietnam in *Gunboat* and, finally, allowed us to get off the road in *Test Drive III*) has created a program that lets players *experience* Formula I from the simple level of a *Pole Position* to a complexity level closer to *Indianapolis 500: The Simulation*. Drivers can let the program keep them basically on the track and automatically provide the shifting or drivers can shift manually and cut cross-country (albeit at a significant reduction in speed and acceleration of damage). Players can use default car settings or customize their cars (and save them to disk) with regard to high/low driver's view, braking pressure, steering radius, wing angle and tires. One can choose to race the courses as they currently exist, challenge historical circuits or create custom courses with the course architect (similar to the one in *Jack Nicklaus Signature Golf*).

In The Pits

Five major automotible manufacturers are represented in GPU: Benetton Ford, Tyrrell, McLaren Honda, Ferrari or Williams Renault. These come with default settings and the player/driver can be competitive in any of them. Nevertheless, like many of the better automobile rac-

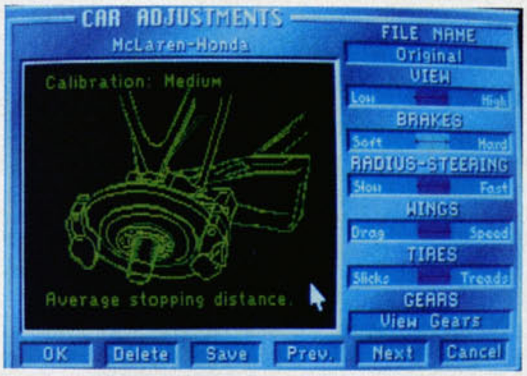


ing games of the last decade, *GPU* allows the player to see part of the invisible sphere of automobile racing and set-up the car. When the player selects the "Car Adjustments" menu, he/she is admitted into the "mystery religion" of automobile mechanics. Not only is there an option for adjusting the driver's viewpoint to a high or low perspective using a five point scale, but the game explains on-screen (with visual cues) exactly what the driver will see. Not only is there a five point scale for adjusting the brakes, but the on-screen description tells the player whether a shorter or more lengthy stopping distance is better for the type of weather in which the race is being run (shorter is for dry and longer is for wet). Players can opt for slowing their top speed and using a high wing angle to hold the car on the track during high speed cornering or they can take it easy on the corners, while setting the wing angle low and blowing by the competition on the straightaways. The "Car Adjustments" screen even explains when to use slick tires and when to use tires with tread.

In short, setting up the car in GPU is a painless. We are not usually privy to the exact reason that Arvyn Senna is able to corner at a faster pace than Nelson Piquet in a given race or why Nigel Mansell makes up so much time on the straightaways. Now, we'll have a better idea of why the winner of a given race spends so much time in the Winner's Circle talking about his team setting up the car for a particular temperature or making a critical adjustment in the late stages of a race. We can even save different set-ups of the same model and experience how much difference there may be in the way they handle.

On The Track

Of course, the real action takes place on the track. Once the car is selected, set-up and ready to go, the player still has to qualify.



There are no digitized voices whispering "Prepare to Qualify" as in the coin-op classic of yesteryear, but there is a familiar "Christmas Tree" to handle the start and the player finds himself or herself ready to use either keyboard or joystick to guide the car over the course and into the starting grid. Naturally, as in real life, the qualifying times determine the positions on the grid. Also, as in real life, the most dangerous moments of the race tend to be at the start. In one race, I found that six out of seven of us were wiped out in a starting collision.

Those who opt for a realistic approach to the path to a World Driving Championship in Formula I will need to memorize the courses through fly-bys (just like in televised golf coverage) and numerous practice runs. Those who are more casual in their approach can opt for a window on the screen that shows every twist and turn of the course *plus* the current position of every car on the course. Those of the latter who wish to rationalize can point out that those positions are often radioed to the drivers from their teams in the pits. Nevertheless, this option is another player-friendly touch that will make it easier for casual gamers to master this simulation.

The scenery-specific courses can be adjusted to detail levels that allow for either satisfaction or speed. The pre-release version offered detailed scenery for two different years of World Driving Championship competition. The scenery is very nice, but one will need a faster machine in order to be able to see it without slowing the races down to a crawl.

Finally, there must be a caveat with regard to the artificial opponents. In the version that I previewed, the opponents were toned down and did not have cars with anywhere near the performance specifications of the player's car and they did not seem to have any specific competitive style programmed for the famous drivers. Computer Mansell, for example, didn't drive his car harder than computer-"sponsored" Capelli. AI routines based on



the actual driving styles of famous drivers, would be most welcome. Of course, licensing fees may yet prohibit having the actual names of leading drivers in the program.

The Winner's Circle

At press time, **Accolade** was nearing the finish line with *Road & Track Presents Grand Prix Unlimited*. The qualifying runs looked very smooth, but the actual race isn't run until the play balance is adjusted and the customers fill the stands. At least, from this Formula I fan's perspective, it looks like it's going to be an exciting race. CGW

The World According To

TITLE:	Populous World Editor
SYSTEM:	Amiga
REQUIRED:	*Populous* (The game)
PROTECTION:	None
PRICE:	$19.95
DESIGNERS:	Alexander Kochann & Oliver Reiff
DEVELOPER:	Bullfrog Productions Ltd.
PUBLISHER:	Electronic Arts San Mateo, CA

Populous fans who are fascinated with behind-the-scenes computer game wizardry have good cause to conjure up a celebration. A hands-on magical mystery tour called the *Populous World Editor* (*PWE*) is coming soon to selected floppy disk drives everywhere. Modifying worlds goes back to the original *Populous,* in which players could, to a limited degree, experiment by rearranging existing graphic elements and game parameters, such as placing good and evil walkers, enabling or disabling deity powers, adding or removing trees and rocks and increasing or decreasing manna supply.

PWE is light-years beyond the elementary custom option manipulations available with the original game. Players using the Editor may alter the appearance of the people, settlements and terrain to design a world with a unique look and character for either custom-mode play or as part of a conquest series. In the process of learning *PWE,* nifty animation secrets and the conquest series world name passwords used by *Populous* are revealed. With the Editor's help, players can gain insight into how *Populous* does so much with so little.

The Editor not only excels in its clearly defined intent, but provides an intriguing duality in purpose of its own. Some can have fun by simply changing things around and others may choose to go further and pick up a gauntlet of sorts. As part of its implied purpose, *PWE* sparks a good-natured dare for players to outdo, or at least rival, the graphics and gameplay balance that made the original *Populous* a brilliant piece of work, an observation players will come to appreciate as they try their hand at the world creation business.

Image Consultant

PWE provides access to the graphic elements, the images, used by *Populous* to construct a world. *Populous* worlds are made up of two distinct image groups called Land sets and Sprite sets. Land sets make up the terrain and are composed of primarily static images such as earth, rocks, grass, trees, houses and castles. Sprites are images that create the illusion of movement: examples include walkers, knights, flags, good man fighting evil man and fire.

A set can be thought of as a special template containing a collection of images inside cells, or frames, that *Populous* recognizes. A land set is made up of roughly 60 images, and each image is stored within its individual cell. A sprite set has about 70 cells, each containing 2 to 4 images used to produce a particular animation sequence. Original *Populous* utilizes one sprite set with four varying land sets. The world look is medieval with characters dressed to complement the era. The four terrain types (or land sets), however, alternate throughout the conquest series of games: Greenery, Sand, Ice and Ash.

The Editor can modify any existing image or create new ones within a cell. Each cell, however, has a fixed descriptive name and an unalterable purpose that has *nothing* to do with what's drawn inside the cell. For example, there are two cells designated as Water. The game alternately paints the water areas on a world map with images of water 1 and water 2 to create the illusion of lapping waves. Whatever images are put into these cells will act as a two-part animation sequence that behaves like water. In the Ash terrain worlds on original *Populous,* lava images were drawn into the two water cells. That's why lava is lapping the land instead of water.



An image performs according to how *Populous* interprets the cell's predefined use for that object in the game. If a player creates Humpty Dumpty World and paints an egg inside house cell 1 of the land set, the image will function as the smallest settlement in the game. People will enter and depart from the egg, enemy knights will destroy and burn the egg (would over easy be asking too much?), plus all other activities associated with primitive settlements will take place with the egg dwelling, thereby maintaining the underlying logic of the game.

When a set is selected and loaded, all the images in that set are displayed in cells on the edit screen. Highlighting a cell calls up a Paintbox editing screen that features only the chosen image, which can now be replaced or manipulated in various ways using an on-screen toolbox. From the Paintbox screen, players can adjust the level data that regulates gameplay on the different worlds linked together in the conquest series. Level data information includes landscape type, opponent's intelligence, computer reaction speed, starting populations, deity powers and other settings used in a particular level.

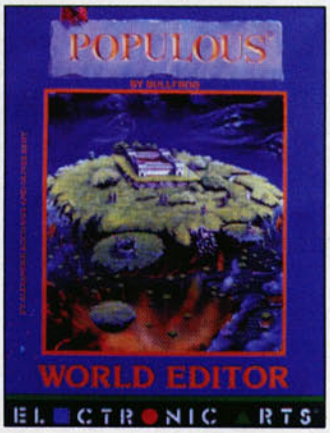
Certain images have adjustable settings (not merely on or off but variable) associated with them that affect both good and evil sides. All house and castle cells have parameters that control death and birth rates, intelligence of the people and the amount of manna generated by specific settlements. Hill, Plain and Water images have parameters that affect the color of the image in the Book of Worlds and what sprite set *Populous* will load with a land set. Players can set parameters globally from applicable land or sprite images.

To demonstrate a jumping-off point for experimentation, *PWE* comes with five land and sprite sets that combine to create five complete worlds: Original *Populous* Green, French Revolution, Space, Fast Food, Wild West, plus a generic abstract land set template for further exploration. Existing sets on the disk can be ed-

...Max

Electronic Arts' Populous World Editor

by Maxwell Eden



ited, but new sets can't be added since the floppy is full. Players can, however, make copies of *PWE* to create and save more worlds.

A creative exercise might include changing the good or evil (depending on a player's orientation) ankh in Space World to look like the mysterious monolith from *2001*. Carrying the theme further, walkers could be apes until converted to knights who are, in turn, transformed into people.

Although *Populous World Editor* isn't difficult to use, understanding how to operate the system requires some effort. In this case, the technologically meek will definitely not inherit the earth. The load, edit and save screens are thoughtfully laid out and all commands are mouse point-and-click or have keyboard equivalents. While the interface is simple, getting the most out of this program requires basic knowledge of Amiga's Command Line Interface (CLI), specifically to check directories, copy files and make data-only disks (worlds without the Editor on them), an inherently more efficient way to play new *Populous* worlds. Those needing help with the CLI can refer to their Amiga manual or get a quick and efficient fix by obtaining Directory Opus, a superb, easy-to-use utility program (one meg memory required) that handles all the necessary AmigaDOS tasks transparently.

Manual Overdrive

Overall, the *PWE* manual does a decent job of explaining the editing process. The following tips and observations are provided to clarify potential gray areas players may encounter while learning the Editor.

In addition to the sprite and land sets on *PWE*, the Editor can edit sets from the copy-protected *Populous* and The Promised Lands disks. To avoid the mishap of forever altering the original, load a selected set from these disks into the Editor's convenient default buffer, make the desired changes, then save to a data disk — not the copy-protected disks, which should be write-protected as a matter of habit. The default buffer is also a convenient window where players can create interesting combinations by swapping cells between different land or sprite sets.

Advanced Amiga users can import images from more sophisticated paint programs, as long as the image is drawn within the pixel (pixels are the building blocks of all sprite and land images) limits and cell boundaries of a pre-saved *Populous* set template.

Hard disk users should follow the install steps in the manual as stated. While it's not explicitly clear in the instructions, only the Editor program will be copied to the hard disk, which is what should happen. When creating a data-only disk, the worlds (land and sprite sets) plus the other necessary files stated in the manual should be copied to the floppy disk, which must also contain a "level.dat" file (available from *PWE* or original *Populous*) to play a conquest series game.

Some Sound Observations

While in perfect harmony for a medieval world, *Populous* sound effects such as knights clanging in battle are annoyingly out of synch when little space knights are duking it out in Space World. A similar inconsistency is also graphically disrupting. The technology indicators (fist, club, sword, crossbow) displayed on the Information Shield that convey the intelligence level of a walker or a settlement are okay visuals for primitive worlds, but stick out like a sore thumb in others eras. A minor glitch is the ability to alter the good and evil pointers. Though their images can be changed, they revert to the default fickle finger of fate from original *Populous*. For example, in Wild West World the good pointer in the good pointer sprite cell is an Indian Arrow. When the world is booted, however, the old familiar hand pointer is back in play.

PWE is speedy on an Amiga 500 with two megs of memory and a GVP HD+ hard disk. The Editor requires a minimum 512K system and one meg is necessary to hear the music. At the very least, two floppy drives are highly recommended. No, *PWE* will not work with *Populous* II.

The authors of *PWE* had a friend whose favorite computer game was *Populous*. So, they wrote a small editing program that could change the graphics of the game and presented the effort to their fortunate comrade as a birthday offering. Now all *Populous* fans wanting to be apprentice wizards can share in the magic of that gift. *Populous* is a great game and *PWE* is an ideal enhancement that breathes new life into weary bytes. Absolute power was never as incorruptible, nor this creative. CGW

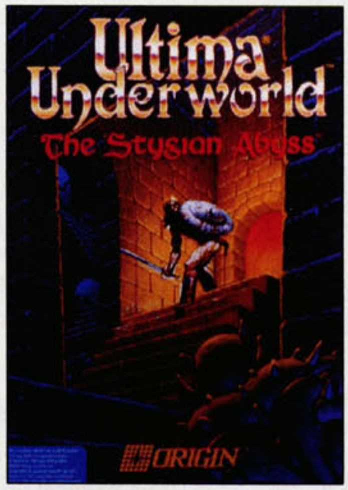
More Information

Populous: The Promised Lands data disk with five new worlds: Sillyland, Wild West, Blockland, Revolution Francaise and Bit Plains. (Electronic Arts, $14.95, *Populous* game required.) Wild West and Revolution Francaise are also on *PWE*.

Directory Opus
($59.95, one meg required)
Inovatronics
8499 Greenville Ave.
Dallas, TX 75231
214-340-4991

GVP
600 Clark Ave.
King of Prussia, PA 19406
215-337-8770







*Abyss*mal Perspective

Origin's Ultima Underworld: The Stygian Abyss

by Allen Greenberg

TITLE:	Ultima Underworld: The Stygian Abyss
SYSTEM:	IBM
PRICE:	$79.95
PROTECTION:	None
DESIGNER:	Paul Neurath
PUBLISHER:	Origin Systems Austin, TX

Among the arsenal of special effects equipment that became available to the film industry during the 1970s was an item called the Steadi-Cam. This amazingly portable device allowed a film director to compose uninterrupted film sequences that smoothly travel from one location to another. It was the SteadiCam, for example, that carried the viewer eerily along the nightmare encrusted hallways and garden mazes of Stephen King's imposing Overlook Hotel in Stanley Kubrick's 1980 film *The Shining*. Settling into *Ultima Underworld — The Stygian Abyss* (*UTSA*), one might wonder if Lord British is not guilty of strapping one of these devices onto some unfortunate employee from **Origin Systems** and depositing that person into some medieval, horror-filled tunnel in order to capture some rare motion picture footage. If this is indeed the case, that employee apparently survived long enough to contribute a unique action perspective to this eagerly anticipated entry into the growing field of dungeon-style role-playing programs.

Inspired, perhaps, by their own company's success in bringing depth and realism to space combat simulation with the *Wing Commander* series, the designers of *UTSA* have replaced the traditional graph-paper design of other dungeon games with an environment that flows past the player in a continuous stream. More than this, the game presents a dungeon world in three admirably realistic dimensions, along with occupants who are constantly in motion. This is an ambitious project, and not without its share of problems. However, it represents a significant step toward the elusive "conceptual world building" that some have unjustly claimed to be "virtual reality."

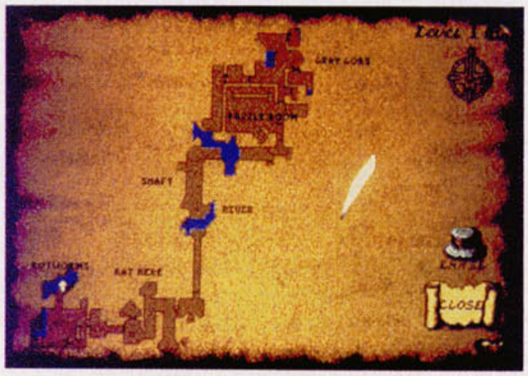
As in most recently released dungeon adventures, *UTSA* is best controlled using the mouse. This, along with the game's real-time action, an icon-based command system and the ability to directly manipulate objects on the graphic screen are now well-established features in the genre, and from what this reviewer continues to call the "gut-level interface." In *UTSA*, however, players may discover that the mouse is barely adequate to accommodate all of the functions assigned to it, much as a good flight combat simulation often demands a more complex input device.

In fact, players will need to acquire some skills formerly associated only with flight or driving simulations, such as the ability to stay "on course" while moving ahead in narrow corridors. Speed of travel is also under the player's control, as is the ability to leap across chasms or jump to different heights. *UTSA* is certainly no arcade game, but timing and coordination are necessary tools for survival.

"Power steering" has also been added to *UTSA* and this can cause some frustration. In other dungeons, players simply click on a left or right arrow in order to turn 90 degrees. Here, players select either a clockwise or counter-clockwise turn, the degree of which is determined by the amount of time the mouse button stays pressed. This is necessary because many hallways and openings branch off at other than right angles. However, bringing the turn to a stop at the correct point can be difficult and a lot of time will likely be wasted spinning around at intersections. Players also have the ability to tilt their point of view up or down. With all of these robotic functions in operation, it is not long before the illusion takes hold that one is actually controlling Britannia's version of R2D2 in Wonderland.

Combat within the dungeon is yet another affair controlled by the mouse. Enemies can attack from all sides and seem to harbor very little guilt when it comes to remaining outside the hero's

limited field of vision. The player's attack is a two-step process, in which a weapon is first pulled back and then released. A more powerful attack results when the time between these two steps is lengthened. A good strategy for combat appears to be one of constant movement, so that players may wish to try a move-pull-move-release pattern. Obviously, combat in *UTSA* can be quite different from other dungeon games in which the hero remains stationary or simply turns from one attacker to the next.



UTSA is very much a part of Richard Garriot's *Ultima* universe. Sometime following the events of *Ultima VI*, it is revealed that Baron Almric has been personally assigned by Lord British to lead an experimental, multi-attribute settlement on the Isle of the Avatar, directly over the former Stygian Abyss. Following a ghostly summons, the player, in the role of the overworked, under-appreciated Avatar, is falsely accused of kidnapping the Baron's daughter. What, then, begins as a rescue mission to save the girl soon becomes a far more critical quest to save Britannia from an unsuspected evil. Within the nine-level, multi-kilometer Abyss, the Avatar will encounter such *Ultima* standards as the meditation shrines and objects of virtue.

Spellcasting in *UTSA* also draws heavily on the system of magic that has already been established in the *Ultima* series. There is no need to gather ingredients for spells, but players do need to collect rune stones, each of which has been inscribed with a letter from Britannia's alphabet. Once a letter has been added to the hero's inventory, it may be used an unlimited number of times in constructing spells, most of which will be familiar to graduates of earlier CRPGs. The ability to cast a particular spell depends on the player's level and number of spell points or "manna" available. As in other games, spells may be used in combat either to alter a player's condition or to bring about changes within a given area. One of the more popular spells allows the hero to soar through the dungeon like a bird. (Did someone mention "flight simulator" earlier in this column?)

The dungeon also contains a variety of magical objects that, upon experimentation, produce an entertaining variety of results. Many of these objects are hidden behind puzzles while others may be obtained from certain occupants of the dungeon. There is a variety of puzzles and mini-quests to be solved in the game and they range from the mechanical manipulation of levers and switches to heeding the impassioned plea of a dead spirit. Other

important questions involve the identity and relationship of Tom and Judy as well as the gentle culinary art of preparing Rotworm Soup.



Conversation with NPCs, using only the finest pseudo-Shakespearean English, is yet another important aspect of *UTSA*. For this, the player responds to questions and statements by selecting phrases and responses from a menu. As experienced Avatars are well aware, unprovoked combat or other mistreatment of innocent characters will result in a diminution of a player's attributes. Non-playing characters not only possess some useful inventory, but also have quite a bit of information to offer. It is possible to trade items with them or obtain their services in repairing inventory already owned.

Although an acknowledged Avatar, the player must enter the dungeon with a minimum of experience. Characters from the *Ultima* series may not be transferred here and so the player must first choose to be a fighter, mage, bard, tinker, druid, paladin, ranger or shepherd. Within each class are several skills, one of which the player must choose to excel in. To survive, however, the player would be well advised to diversify and master as many of these skills as possible. All classes are able to cast spells, although mages have the obvious advantage. A player's skills will improve as a result of meditation at one of several shrines using special mantras, both of which may be found throughout the dungeon. The player will also enjoy an increase in vitality as experience is gained and a higher ranking is assigned.

The program uses a common method for carrying and manipulating inventory, that is, clicking on a container opens a window to reveal its contents. From here, an object may be taken, used or consumed. Unexplained changes in the hero's inventory appear to be the result of a bug in the program and Origin has already been made aware of the problem. For now, it is important to both examine inventory and save the game often.

There are also very definite limitations as to how much a character may carry and this amount is further reduced by the presence of heavy protective armor. Throwing modesty to the winds, it may help to accomplish certain tasks without clothing.

Graphically, most of *UTSA*'s "fireworks" are in its animations and not in its backgrounds. Most scenes are murky and dim in appearance and objects generally lack detail. At times, certain perspectives are confusing. Chasms that appear to have been crossed already may *still* prevent the player from moving forward. Similarly, certain doorways that appear to be within reach remain frustratingly unapproachable.

The game's sound effects are minimal, even with a recommended soundboard. The program does, however, feature an interesting and effective musical score. Far more impressive sounds and pictures have been produced for other dungeon games, generally on the Amiga and Atari ST computers.

UTSA is one of the new generation of Origin games that will require high-performance computers on which to run. A minimum configuration includes a 386 SX processor, two megabytes of RAM and an expanded memory manager. VGA graphics capability is also required, as is a hard drive. The program will occupy between eight and 13 megabytes on the drive, depending upon which sound and display options are selected.

Two features of this package deserve a final special mention. First, the program includes a powerful auto-mapping feature that actually allows the player to permanently annotate the map as it is displayed. An option to dump this map to a printer would have been even more appreciated. Second, the documentation that accompanies the program is outstandingly clear and complete, yet relatively brief.

What may be overlooked in *UTSA* is its enjoyable story and well-crafted puzzles. More than that, the designers have admirably avoided overwhelming the player with an excess of any one obstacle. Other dungeon exercises have too frequently called on preposterous battles and endless forests of mazes to provide the main challenge. Herein lies an enjoyable challenge with a unique game-playing engine to back it up. To that abused employee at Origin who carried the SteadiCam — "Nice Work!" CGW

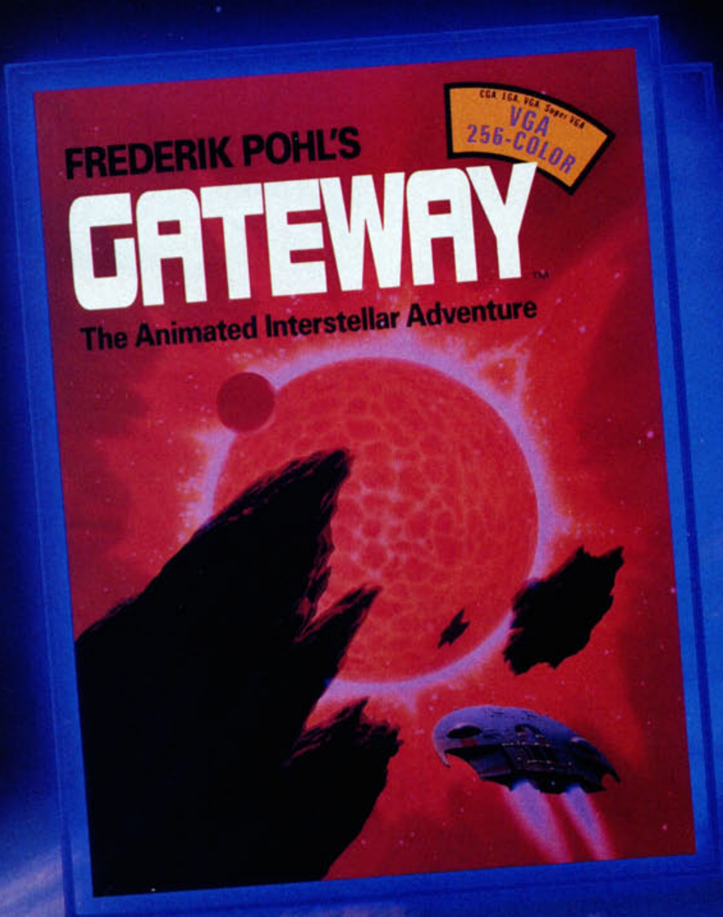
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Meet Roberta Williams, *Scrypt*keeper

Tales from the Dark Side of the Sierras

by Russ Ceccola

Just as there are two sides to every story, people have two halves that are in a constant struggle for recognition. Most of us normally act one way, but every now and then have to let out our inner demons and remove our inhibitions. Roberta Williams, Sierra On-Line co-founder and demure, soft-spoken woman, is one of the most popular game designers in the computer game field. Best known for her *King's Quest* series, *Mixed-Up Mother Goose* and *Laura Bow* mystery games, one could classify the bulk of her design work as fantasy. Recently, Williams decided to purge some of her own inner demons by designing a frightening, modern-day horror game with a female protagonist. Unnamed at press time, this adventure game will be the first in Sierra's new line of serious horror games, tentatively dubbed *Scary Tales*. In a recent interview, Williams revealed her appreciation of horror movies and fiction and offered insight into why *Laura Bow 2* has such gruesome murders and why the first *Scary Tales* game will be something special.

CGW: Tell us about the first *Scary Tales* game. What can you tell us?

RW: The horror game is true horror in every sense of the word. It's not going to be out until 1993. It's modern horror. I've wanted to do horror for a long time, but didn't think the technology in computers was there for the game, where you could really do horror and get away with it — in other words, scare people.

I've been studying horror for quite some time before deciding to do this game and I'm trying to understand how horror and suspense work, as well as the techniques in developing them. Up until now or next year, the technology just hasn't been there to develop the game. It's still going to be tricky to really pull it off because when you see a horror movie or read a book, suspense is the key factor — suspense and anticipation of things to happen on the part of the reader, watcher or player.

It's something that's drawn out for a long time. The person experiencing the story is being led very deliberately, very slowly to a climactic point of terror. Anyone who writes a good horror story tries to keep the anticipation going as long as they can, because that's what builds the terror. That's one component. I had to think of how I could maintain suspense in an adventure game, because most people, as the protagonist in an adventure game, wander around all over the place.

The person playing the game should have the freedom to do what they want. This is what's tricky about writing an adventure game. You have to control them to some extent because otherwise your story means nothing. But if you control them too much, they don't like that — they resist. It's a real fine line. If you give them too much exploration, your plot goes right out the window. If you don't give them enough, then they feel confined. I had to include suspense, which is one of the trickiest things in plotting a story. That's from a design standpoint.

In horror...suspense is the key factor — suspense and anticipation of things happening.

Where the scary parts come in are situations like opening a closet door. You lead the player through suspenseful plot points to believing that there may be something behind the closet door. In our games, the way that they are now, if a person wants to open a door, he clicks the hand on the door and the on-screen character walks over and opens the door. That's not very scary. In a horror story, it's not as simple as just opening the closet door. You have to linger at the closet door, caress the closet door. You have to show hesitation on the part of the protagonist. The person playing the game must be led to believe that there is something terrible behind that door. You try to keep the door from opening as long as you can to build that anticipation. I have to think how I can keep the player from going over and just opening the closet door. I have to build that anticipation.

When you do open the door, whatever happens is going to be very quick. We have to be able to switch pictures in a split second. If there is somebody in there that's going to jump out at you or there's a dead person hanging there, the computer has to bring it up on the screen quickly. It won't be very scary if the computer has to go to disk, etc.

The other thing that is important in horror (which, up until now, has been hard to do) is that, in order for a person to be afraid, they have to be able to relate to the protagonist and people that they see in the game. They have to be human and look human. They can't look like cartoon figures. You can't relate to cartoon figures as much as to characters who look just like you. We want to use real actors, like in *Police Quest III*.

CGW: That came across real well in the game.

RW: Only they just did it in story sequences. In the game, you still move around a cartoon figure. I want to continue the theme and walk around real people and not use cartoon people in the game ever. We have to figure out how to do that. As you see, there are some technical issues we have to confront to be able to carry off horror and have it work. That's why up until now, no one has done much horror or, when they have, they have gone the easy route with ghosts, monsters and lots of gore.

CGW: Like some of the goofier and gorier attempts on horror like *Ghostbusters* or the *Elvira* games, both fun, but not really horror?

RW: Exactly. My game is true horror. It's modern and it's very real. The events happen to a young girl who is a a real person, someone you can relate to. She's in her early 20s, lives in Sacramento and practices as a lawyer. She goes up to the mountains near Lake Tahoe to do some hiking. She sounds like a semi-normal person. We're not talking about someone that couldn't really exist. What happens to her is a nightmare, but it's portrayed as real and possible. She desperately tries to get out of the situation, but it gets worse and worse and worse.

CGW: That's great. Originally, we had heard that it would be a Gothic horror game. We were concerned that it might be more fantasy-horror, a combination of your previous styles.

RW: Not at all. This is a real horror game, more along the Stephen King lines. The closest you could label it would be as a psychological thriller. It's set in a small town in the middle of nowhere in the mountains of the Sierra Nevadas. She gets lost and this town is nearby and its citizens appear to come to her rescue. I am a fan of horror. Although I have

done a lot of what you might call romantic fantasy-type games. That's not really me. I think people will be really surprised by this game.

CGW: So now we get to see the real you! Anyone who has met you knows how quiet and demure you are.

RW: Yes, I guess. This game will come unexpected to many of my fans. It reveals my other side. One thing that horror does is touch upon taboos in society that people don't want to talk about or admit they exist. We're touching upon a few taboos in this game. One is a church that may not be quite right. There are other gruesome aspects of human nature in this game that people don't always want to talk about.

CGW: What influenced you to design this game? You say you have an interest in horror that goes back a long time. Is that the impetus behind the game?

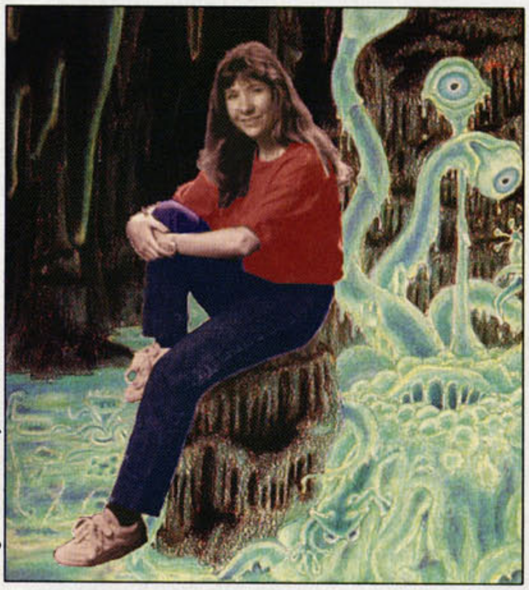
RW: I have had a strange hate and love affair with horror for as long as I can remember. It started out when I was four years old. We lived near a movie theater where they would show horror movies every Friday night. I remember this vividly because it had such an impression on my life.

It was Friday night and we were eating spaghetti. My dad was getting ready to go out to the horror movies. I begged to go with him. He told me I was too young to see a horror movie. I told him that I would be okay because, at the time, I thought horror movies were like King Kong, with big monkeys and the like. I said I could handle it. For whatever reason, he changed his mind and said that I could go to the movie.

So he took me to the movie and I was happy because I got to go out with my dad on a Friday night, just me and him. I was four and felt like a big girl. I started watching the movie and felt that something was wrong because it wasn't like King Kong, with monkeys and things. It looked like a real movie with real people. And then something really horrible happened. Before the horrible scene, the whole screen started waving and turning funny colors. I remember turning to my dad and asking him why the screen was doing that. He said that something might happen. I didn't know what might happen, but I remember one scene in particular.

This guy in the movie got a package of binoculars as a present in the mail. Just as he received it, the screen did this blurry, wavy thing, which was really a warning to people that something bad might be coming. He put the binoculars up to his face, to his eyes, and suddenly daggers came out of the binoculars and went into his eyes.

There were other scenes like that too. One lady went into her bedroom and sat down at her dresser to get ready to go to bed. She does all the things she would normally do before going to bed and then lays down on the bed. The second she laid on the bed, she looked up and saw this guy looking down at her from a lamp over the bed. I screamed! I wasn't prepared for that kind of shock at four years old. I wasn't prepared that those people could exist. He jumped down on her and cut off her head! They showed it. I saw it, even though I had my eyes covered. On the way home, I got in the car and immediately put my feet up on the chair because I was afraid that there was someone under the seat who would grab my legs. When I got home, I screamed all night. I wanted to sleep with my parents, but they wouldn't let me. I screamed and screamed, couldn't sleep and had to sleep with the light on and under the covers. I was like that for the next 10 years of my life — honestly! I still can't remember what movie that was.



Background Illustration by Mark Ferrari

CGW: So that's what you want to make people feel like after playing your game?

RW: Well, it took me a long time before I was comfortable with horror again — until I was a teenager. I was 16 before I could watch a horror movie or read a book, but then I really loved it. Horror had always been some kind of strange thing in my life. I don't know why I'm doing it now. That movie gave me some understanding about what scares people because I was scared so badly. This game has very little blood and gore. There are two places that I can remember where there is a relatively unpleasant scene. They're over quickly and they're very much a part of the story. They weren't done for the sake of gore. Gore and blood aren't the point of the game.

CGW: What are the plans for the future of the series?

RW: The series will emphasize horror, but it won't be the same as our other series, where we have characters that go through each game and there is continuity. Each game will be completely separate and have its own story. I wanted to do the first one to set the tone of the series. People have been amazed at some of the terrible things I put in the story because they didn't think we could do them, that we could include such things or talk about horror in that way. They were thinking like you, as far as Gothic horror and ghosts. I wanted to do the first game so others would know it's okay to do these things.

CGW: We like your approach to the design. Do you think that its uniqueness in the game market will make it a success?

RW: Yes, I do. It is unique in this industry. The ending is also unique. The story is done at this point, but we still need to put in the puzzles and work them into the story. We know the story, but we still need to break down what she does in the town and in the game to allow the players to take over. The object of the game is to escape from the town. The player wants to get her out of there. The townspeople obviously don't want her to leave. We're building into the game now things she discovers about the people and town. She has to go places and figure out things for herself as well as talk to people.

CGW: Are you interviewing people for the characters at this point?

RW: No, not yet. We have a very established pattern of how we do these games at Sierra now. The first thing we do is figure out the design and all the details, story line and puzzles so that we know exactly what the game is about. Once that's done, then we start character sheets that describe the characters and their personalities, get the artists together and think about actors. We have been rotoscoping people for some time and reducing normal actions down to single-frame cels. With this game, we plan to photograph the actors and keep them in the game as themselves. The characters will have to be a little bigger than the ones we have now so that they look more distinct. I wanted to do photography in real places, but the technology can't handle that level of detail at this point. We're going to do the most we can.

CGW: What about music and sound effects? Certain movies like *Psycho* and *Friday the 13th* wouldn't be the same without them.

RW: One of the things we're going to do a little differently with this game is the music/sound effects part. We don't normally think about them and cinematic scenes dur-

ing the design process. With the horror game, we're going to plan all that out in advance. We have to plan in advance, because if we don't do it right in every aspect, it will fall flat on its face. I want the game to be good, get the series off the ground and get a lot of attention.

CGW: What kind of stuff are you reading and watching that might influence the horror game?

RW: I'm not doing it so much now, because it's after the fact. The story is already thought out. I did a lot of that kind of activity before designing the game. I did quite a lot of research, perhaps too much, to the point where I started having nightmares. All I was doing was reading horror books and how-to-write-horror books, as well as watching horror movies. It was getting depressing. I was looking more for suspense tales than gore. I was reading everyone from Stephen King and Shirley Jackson to the *Oxford Book of Ghost Tales* to books on how to write horror.

CGW: Was there any book or movie that stood out as really bothering you?

RW: It's funny that you ask, because there was one that stood out that gave me the worst nightmares of all. The story took place in Canada. The characters got lost, something happened and they were never heard from again. They sent out search boats and they never found them. In the past few years, they discovered the graves of the people who died and the corpses were perfectly preserved in the ice. Most recently, experts discovered evidence of cannibalism on the team. I went to bed that night and had the most horrible dream of people eating each other in a cave in the Arctic. I woke up and started screaming and couldn't stop. I quit reading horror after that. Other research I did was having people tell me scary stories and their favorite campfire stories. What I was trying to do was dissect horror — find out what makes it tick. I think I did.

When I got home, I screamed all night.

CGW: How about your role at Sierra? Has it changed of late?

RW: Yes. Lately, I am doing a lot of projects, but not necessarily the actual design work, more of the job of an overseer of other people's work to get the design done correctly. Besides the horror game, I'm also finishing up *Laura Bow 2*, working on *King's Quest VI* and starting up a prehistoric game.

This will be a light comedy. You are a clumsy Neanderthal whose job it is to watch the fire and not let it go out. If it does, there will be real trouble because this particular tribe of Neanderthals don't know how to make fire, although real ones did. During the night, you fall asleep and the fire goes out, but no one notices because the rest of the tribe is still asleep. The object of one part of the game is to find and bring back some fire. You see lightning in the distance and go to capture the fire it causes, but get lost along the way and captured by Cro-Magnon men. The game is set up in parts, with each part offering a further challenge for your character.

Roberta Williams has her work cut out for her in the horror genre. With the right approach, as she already has, she can start off a successful series with the first Scary Tales *game. Now if anyone can figure out what movie she saw at age 4, they can give her those same nightmares all over again!* CGW

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Warning: Although "The Scorpion's Tale" takes place in a warm and comfortable tavern of the mind, complete with a nice, cozy fire of vibrant images, our resident storyteller conjures up illuminating hints about games. **If the gentle reader eschews hints, let him beware!**

Scorpion's Tale

Treasures of The Savage Frontier

Advanced Dungeons & Dragons



Pardon me while I peek out the window. Yep, looks like summer is here. The only good thing about this is that it means autumn can't be too far behind. Summer is not my favorite time of year (bet you guessed that already). Heat, humidity, thunderstorms...bleah! Not to mention (but I will anyway) that around this time of year, Fred sometimes turns a little savage (over a slow fire, of course). *Treasures of the Savage Frontier* is the second in SSI's new gold box series and sequel to *Gateway to the Savage Frontier.* It takes place in pretty much the same area as the previous game, the northwestern coast of the Forgotten Realms. However, you'll be visiting more places this time around, including fifteen towns and villages, three islands and a mountain. If nothing else, all that trekking will certainly keep you in shape! As usual, the forces of evil are up to their nefarious tricks again, and you have to stop them in the usual hack'n'slash extravaganza. Since this is a sequel, you can bring your party over from *Gateway* (if you played that and have the save games) or create a brand-new one if you didn't play *Gateway* or don't have the saves. I recommend transferring the party if you possibly can; they come over with most of their equipment intact and will give you a better start in the game.

Party Line (Getting Started)

Creating a new party is done along standard gold box lines: you have your Humans, Elves, Dwarves, Half-Elves, Gnomes and Halflings, along with the professions of Fighter, Ranger, Paladin, Mage, Thief and Cleric. Be sure to read all the tables in the back of the manual (if you're not familiar with this system, or to refresh your memory if it's been a while), so you know the limits for each race and profession. In this one, Clerics get up to tenth level, Fighters and Thieves up to twelfth and everyone else can go as high as eleventh, provided they are not restricted by race to a lower level. There are some nasty fights near the end of the game, where magic will be of great help, so you should have at least two mages in the party, and three would be better (they don't, of course, have to be single-class mages).Once your group is ready, the game proper starts in the Dwarven town of Llorkh. Your band of hardy (foolhardy?) adventurers has been summoned there by Amanitas (some of you may remember him from *Gateway*) to help the Dwarves in their struggle against forces from Zhentil Keep. This mainly involves cleaning out the stronghold in town, and is primarily a search-and-destroy mission. After you've attended to that, you can run off to Secomber and another chat with Amanitas.He doesn't really tell you a whole lot, but he does give you a magical amulet. This amulet is an invisible inventory item that is always with you. By using the amulet when you camp out (the option appears automatically), Amanitas can communicate with you. That's how you know where to go next in the game most of the time.Much of what you'll be doing (aside from fighting, of course) is unraveling various enemy plots. The Zhentarim and their friends are working hard to foment suspicion and hatred among members of the Lords Alliance, in various underhanded ways. Your job is to discover and expose all their dastardly schemes, one at a time.

Fight for the Life of Your Party (Combat)

Combat is generally much the same as it is in any gold box product, but a couple of new twists have been added in



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Treasures. One of these is weather. Bad weather (such as snow) has an adverse affect on fighting. Your movement rate is reduced, and your chances to hit are slightly altered. This is an interesting concept, but still needs some work. It's one thing to be affected by snowfall when trudging through town and country. It's quite another to have it affect you when you're underground in a mining tunnel. They must get some *really* powerful snowstorms in the f*orgotten Realms.* Heh.The other new feature, however, requires your attention. This is the use of reinforcements. There you are, merrily mopping up the remnants of some band of nasties when, all of a sudden, more of them pop up, apparently from nowhere. This can be a little disconcerting, especially if you've recklessly used up most of your better spells. Ooops! You'll need to be a little more conservative than usual with magic this time around. While "extras" don't show up for every battle, it does happen often enough to keep you on your toes.Your side, by the way, also gets some reinforcements of its own when the enemy is bolstered by fresh troops. Usually, you can control some or all of the friendlies, so you can at least keep them out of the way while the fireballs and such are going off. However, what you get are fighter types, so you'll still have to depend on your own characters for magic.One other out-of-the-ordinary feature cropped up during play. We rescued a fighter called Siulajia and she joined the party (good fighter, by the way). After awhile, usually when we stopped at an inn, she and Lomis, one of my Elven F/MU's, started having private talks together. Before long, it was pretty obvious they were falling in love with each other (all this, mind you, being done by the program) until the end (you can wander around after the final battles) of the game, when Siulajia, for no discernible reason, suddenly announces she's causing too much trouble and takes off! Perhaps that was the best thing SSI could think of to do, since it's unlikely you'd be allowed to transfer an NPC into the next game. Still, after such a big buildup, it's a very anticlimactic letdown to have the matter just stop in that fashion.While you can



roam around the wilderness at random, or visit towns out of sequence, it's better to follow the path as laid out by Amanitas. There isn't much of interest in the outdoors here. You will come across parties of Dwarves from time to time, who tell you about certain dungeons

It's My Party and I'll Cry If I Want to (Victory Conditions)

This has to be the silliest part of the game, since all you need to do is go into a dungeon and find your way out again. They are very small and have no treasure nor anything else of value. At the end (when you've been through the last one), you get some extra experience. The reasons for dropping something of this rather trivial nature into the middle of the game are rather obscure. In any case, if you never get around to doing these odd dungeons, you haven't really missed a lot, and you can finish Treasures without them. Of much more importance are the mysterious "lucky papers" that you will be coming across as part of the loot when you defeat some enemy groups. There are lucky papers for each town in the game, and you must collect one paper for each town. You don't need more than one, but you must have at least one. You also have to collect three crystals. These are not so easy to come by. Different enemy groups carry different crystals, but not all groups of a type may have them. In fact, my own party had gone very far into the game, right up to the meeting with Jagearda (another person whom you may recall from *Gateway*), and we had only two crystals. Fortunately, she gave us the third one. Just as well, since you must have both all the crystals and all the papers before going to the big meeting at Mirabar.The successful conclusion of this meeting will send you on to Fireshear and the end game. There is no way to reach Fireshear until after you've finished up in Mirabar. You wouldn't want to get there too soon, anyway, since it is around this time that you begin to encounter some very tough opposition. Sort of the enemy elite. These guys have very low armor class (on the order of -8 or thereabouts), a nasty repertoire of spells and very good chances of hitting you in combat. They will *not* be pushovers. Past Fireshear is your final goal, the Ice Peak.— or rather, the fabled dragon's hoard hidden somewhere inside the mountain. Naturally, the bad guys are looking for it, too, and as it turns out, they get there a little ahead of you. This, of course, is the big fight of the game and takes place against the enemy elite, with reinforcements on both sides. You may want to drop the difficulty level down to novice for this one. It is going to be a very hard combat, however well-prepared you go in. Besides, there's another consideration. The dragon's hoard isn't a fable. Neither is the dragon.You guessed it: right after your knock-down, drag-out battle with the Zhentil forces, you have to take on Mr. Scales. With no opportunity to save; the two combats are back-to-back. So don't use up all your good spells and/or magic items in the first fight; keep a little in reserve for the next one. You'll be glad you did. You may even survive. Well, I see by the old invisible clock on the wall it's just about that time again. Remember, if you need help with an adventure game, you can reach me in the following ways:

On Delphi: Visit the GameSIG (under the Groups and Clubs menu). On GEnie: Stop by the Games RoundTable (type: Scorpia to reach the Games RT).By US Mail (you *must* enclose a self-addressed, stamped envelope if you livein the US): Scorpia, PO Box 338, Gracie Station, New York, NY 10028.Until next time, happy adventuring! **CGW**

CD Book. CD Book Move! Move, Book, Move!

Why Johnny Can "Read" Talking Books

by Sara Reeder

Move over, Mom. Squeeze in closer, Dad. Those cozy evening hours curled up in the big chair with the kid, the cat, and a stack of books are about to get a whole lot cozier. Before the year is out, it looks like you're going to have to make some room for the computer, too. The reason is a new kind of computer entertainment variously called "talking books" or "living books." These are, primarily, the old familiar kiddie literature transferred to CD and dressed up with music, animation and real-voice narrations. Kids can flip through the pages, clicking on various areas to get sound effects and short animation sequences *or* they can click on words and sentences to hear them read aloud, often in more than one language.

Although talking books are a hot new item on the classroom software scene (and get glowing reports from teachers, as you'll see in a moment) you probably won't find more than one or two talking book-type products on the shelves at your local **CompUSA** right now. That's about to change, however, as a large crowd of CD developers and manufacturers are convinced that over the next few years, as the number of CD-equipped computers takes off, the genre will become as ubiquitous as Legos and Dr. Suess.

After all, the notion of matching children's books to CD technology is nothing short of inspired. Quality kids' books are short on text and pages (you'll generally find a quarter to a third the number of scenes required for your average graphic adventure), illustrated with lots of colorful detail and even more charm, and involve a small cast of well-defined characters that kids can relate to easily. CD's disk-access and data transfer weaknesses might give gamers fits, but the medium's strengths — beautiful pictures, small but elaborate animations, and breathtaking sound — can bring every detail of a beloved book to vivid life *and* give the familiar characters a voice. In short, CD has exactly what it takes to turn a good kids' book into great theater.

Given this natural fit, it's no surprise that you'll see talking books this year on no fewer than four of the major CD-based platforms — MPC, Macintosh, CD-I, and CDTV. The first big hit — and about the only one you can buy right now — is Mercer Mayer's *Just Grandma and Me*, **(Broderbund)** which will probably go down in history as the Carmen Sandiego of the talking book genre. (At a recent demo at the Computer Game Developers' Conference, the mesmerized crowd — about 100 game designers — spontaneously erupted into



enchanted choruses of "Ohhh!" and "Ahhh!" with every turn of the page.) **Broderbund** expects the *Living Books* division to become one of their essential businesses in the years ahead and is planning several more products this year for both the MPC and Mac.

An even earlier pioneer is **Discis Knowledge Research** of Toronto. Their 16 Mac titles and 11 CDTV titles have already gained widespread classroom acceptance, and will be sold for home use starting this fall. Because the Discis books are designed to work into the "whole language" curriculum being used in many schools, the company chooses books on the basis of teacher recommendations. The Discis products aren't as elaborately orchestrated and animated as Broderbund's efforts, but (like most education-oriented programs) they come with lots of worthwhile teaching suggestions and ideas for related activities.

Philips considers the talking books concept critical to the success of their CD-I player, and is rapidly building a basic library of public domain children's classics. Instead of licensing popular books, as Broderbund is doing, they're placing their bets on celebrity talent. Robin Williams doing *Pecos Bill.* Jack Nicholson telling Rudyard Kipling stories, with Bobby McFerrin making the music. John Gielgud as the voices behind *The Emperor's New Clothes.*

The Big Questions

Any thoughtful, computer-literate parent knows from personal experience that once you get the computer involved in something, the nature of the thing is going to change. Even though talking books are nothing more than a small blip in the market right now, the concept has the potential to create a widespread revolution in the way kids relate to books and to computers. Given how fundamental these relationships are, it's definitely not too early to start asking The Big Questions and looking for anecdotal evidence that might suggest some answers.

Big Questions #1: What does the computer bring to the experience?

The idea of talking computer books is so obvious and simple that it's hard to imagine that they could hold a kid's interest for very long. John Baker, the Broderbund VP in charge of Living Books, is the first to admit that a parent who's a gifted and animated storyteller can probably create as much involvement and character identification as an onscreen book. "The story is just a framework," he observes. "The real charm of the experience is in what you do with it."

On the other hand, a tired or rushed parent reading "Peter Rabbit" for the 827th time is not likely to deliver the same Oscar-quality performance she did the first 20 times around. The computer, however, will read a story over and over, word-by-word, in German, and backwards, if you like, for as long as the kid wants to play. This feature alone may be enough to send parents to the computer stores in droves and it's also the basis for building a good relationship with books in general. "What the computer lacks in

human interaction, it makes up for in availability," says Pat Neu, a fourth-grade teacher who teaches computer topics in Mountain View, CA. "Favorite books should be revisited over and over again. That's how kids establish a lifelong love of reading."

Neu is also impressed with the amount of control the Discis books give her primary-schoolers. "The best educational software puts kids into a little world where they're given enormous freedom to explore new concepts on their own. With computer books, they can push the buttons, decided when to go forward and back, or repeat something funny as often as they like. Most importantly, they get a sense of being in control, of taking charge of their own learning process."

Big Question #2: What, if anything, is my kid learning?

There are several very tangible reading skills that computer books reinforce like no other medium. At the preschool and primary levels, the most important of these is what folks in the ed biz call "print awareness" — the association between sound, meaning, and those little squiggles on the page. The simple act of highlighting the onscreen words and sentences as they're spoken encourages kids to listen, follow along, and memorize the word's appearance — all important parts of learning to read. "Every time you click a single word, it's spoken the same way, with clear pronunciation," says Neu. "For preschoolers, the repetitiveness is a powerful idea."

Just Grandma and Me also teaches preschoolers another important skill set — basic computer use. At the beginning of the story, the main character dances around the screen and explains how to use the mouse and where to click when it's time to turn the page, read the words aloud, and so on. "My three-year-old mastered the basics of using a Mac in two days flat," said one parent. "She went from running the mouse around aimlessly, to getting the program to do everything she wanted it to do in an instant."

For kids who are already reading, talking books encourage creative wordplay. Some of the Discis books are designed with an on-screen dictionary where children just click on the unfamiliar word and the program tells them what it means. Further, they're a boon to otherwise reluctant readers — kids who can read, but just can't be bothered unless they're pushed. "They're very motivating," Neu smiles archly. "Even at the sixth grade level, the kids just kill each other to get at the computer." She's optimistic that talking books will become an important gateway through which more kids will learn the joys of independent reading.

And when the kids are finally getting bored with the story in English, they can try it in another language. Spanish? French? German? Japanese? Almost every product introduced so far includes the ability to read and hear the story in more than one language. This capability lets you introduce your kids to a foreign language while giving them the security of a familiar tale; and teachers are excited about reaching out to their non-English-speaking students with a story that can be read in both languages. "In all languages, the words are well-pronounced, with correct accents," says Neu. "The possibilities haven't even begun to be explored."

Big Question #3: Isn't there a down side to all this?

If there is, the jury won't be in for years yet. However, those who've spent time with computer books have raised a couple of possible concerns to watch for. The first one is that, as kids get used to the extra visual and aural stimulation computer books provide, their expectations will rise so high that they'll lose interest in printed books entirely. (This won't sound at all far-fetched to parents who've seen their kids swallowed whole by a Nintendo deck.) Neu discounts this possibility. "Sometime between fourth and sixth grade, most students start looking for more depth and meaning in their reading than even the most creative talking book designer can squeeze onto a disk," she notes. (In fact, the need for more complexity makes this a great age to turn kids on to simple graphic adventures and fantasy role-playing games.) "And even before that, there are plenty of excellent beginner books that simply don't lend themselves to CD adaptation. In these cases, it's natural to turn to print. After all, it would be almost impossible to put *A Tale of Two Cities* on disk."

Another concern is that CD books will be used as a substitute for family reading-aloud rituals. "There's a natural human need for interaction that a computer can't meet," continues Neu. "Even in the classroom, kids prefer to work at the computer in pairs, because they love to talk about what they're doing." Her observations are backed up by several parents we talked to, who said that kids invariably tried to drag them over to the computer whenever they wanted to play "Just Grandma and Me." According to one parent, "The computer can't ever compensate for a warm lap, loving arms, and someone who will talk about the book with you as you go."

Big Question #4: How can I help my kid get the most from a talking book?

The parents and teachers we interviewed were fairly unanimous on the following points — many of which are simply good common-sense guidelines for *any* kid using *any* kind of program:

Buy the book if it's not already packaged with the CD. This gives your kid another way to interact with the story when she's not at the computer, and helps reinforce the idea that talking books are different, but not necessarily better.

Use the computer with your child whenever possible. Or, try to set things up so there are two or three kids using the computer together. Though the biggest strength of computer books is that they're available when you aren't, it's wise not to get into a constant habit of using the computer as a baby-sitter. Also, your child will get more out of the experience if he has someone to share it with.

Establish a daily read-aloud time. The family that spends fifteen to 20 minutes, every night at bedtime, is guaranteeing their kids' literacy. As one teacher puts it, "The best schools and the best computer books can never substitute for 20 minutes spent reading aloud every night. Your kid's computer literacy can never be as important as the time you spend reading together. It's absolutely the most important legacy you can give your child."

Of course, if it's the 827th reading of *Peter Rabbit*, why not let the computer handle it? CGW

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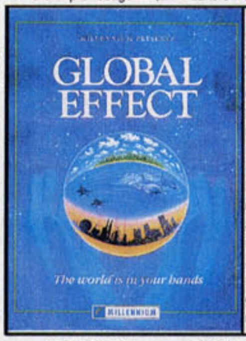
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- Dealers Choice Poker $32
- Dr Thorp's Blackjack $32
- Ewd O'Thorpe Blackjack $19
- Electric Jigsaw $12
- Faces: Tetris 3 $25
- Femmes Fatale $26
- Femme Fatale DD 1-3 $18
- Games People Play $27



In 'GLOBAL EFFECT' you are called upon to protect civilizations on distant planets. In save a world, you must solve environmental problem; in rule a world, you have full military options to use against your opponents; and in create a world, you must build from the ground up. Has modem play. **$32**

- Battles of Napoleon $32
- Battleship Bismark $26
- Battle Tank Barbarosa $36
- Battle Tank Kursk $36
- Blitzkrieg Ardennes $29
- Borodino $30
- Bravo Romeo Delta $37
- Campaign $29
- Carriers at War $37
- Carrier Strike $42
- Charge Light Brigade $34
- Civil War SSI $42

- Red Lightning $12
- Return to the Falklands $28
- Rising Sun $26
- Rommel at El Alamein $36
- Rommel at Gazala $36
- Rommel North Africa $24
- Rorke's Drift $34
- Second Front $29
- Seventh Fleet $36
- Stalingrad Campaign $36
- Storm Across Europe $12
- Third Reich $27

- Liberty or Death $37
- Lost Admiral $34
- Lost Admiral Scenario $26
- Lost Admiral Enhanced $38
- Lost Patrol $12
- Medieval Lords $37
- Medieval Warriors $15
- Mega Lo Mania $31
- Merchant Colony $34
- Millenium $24
- Nobunaga 1 $37
- Nobunaga 2 $37

IBM ADVENTURE

- Advnts Willie Beamish $34
- Advnts Willie Beamish 2 $39
- All Dogs Go to Heaven $13
- Altered Destiny $34
- B.A.T. $19
- BAT 2: Koshan Conspy $32
- Castle of Dr Brain $34
- Chmbr Sci Mutnt Prstss $25
- Code Name: Iceman $21
- CodeName : Iceman 2 $39
- Colonel Bequest $21
- Colonel Bequest 2 $34
- Conquests of Camelot $21
- Conquests of Longbow $34
- Conspiracy Deadlock $34
- Countdown $37
- Covert Action $29
- Crime Does Not Pay $29
- Crime Wave $34
- Cruise for a Corpse $34
- Dark Heart of Uukrul $34
- David Wolf:Scrt Agnt $15
- Deja Vu $12
- Deja Vu 2 Lost in LV $12
- Die Hard $28
- Don't Go Alone $ 9
- Duck Tales $15
- Earthrise $12
- East v West:Berlin '48 $ 9

- Leisure Suit Lrry Bundle $39
- Light Quest $32
- Loom $19
- Lost in LA $37
- Lost Treasures Infocom $42
- Magnetic Scrolls Bndl $34
- Manhunter NY $28
- Manhunter SF $15
- Maniac Mansion $18
- Martian Memorandum $37
- Mean Streets $37
- Mixed Up Mthr Goose $29
- Mixed Up Fairy Tales $29
- Murder by the Dozen $15
- Murder Club $28
- Murders in Space $12
- Oregon Trail $28
- Out of this World $36
- Plan 9 from Outer Space $31
- Police Quest 1 $34
- Police Quest 2 or 3 $34
- Prince of Persia $25
- Rise of the Dragon EGA $29
- Rise of the Dragon $34
- Rocketeer $32
- Search for the King $24
- Secrt Monky Islnd 1 $23
- Secrt Monky Islnd 2 $38
- Sex Olympics $24
- Sex Vixens from Space $12

- GO Master 5 Dlx $109
- GO Master 5 Dlx WIN $109
- GO Joseki Genius $39
- GO Junior $19
- GO Master 5 DOS/WIN $39
- GO Scribbler $34
- GO Tactical Wizard $39
- Grand Slam Bridge $22
- Home Casino Spectaclr $15
- Hong Kong Mah Jong $32
- Hoyle's Games 1 or 2 $21
- Hoyle's Games 3 $29

IBM SPORTS

- 4D Boxing $17
- 4th & Inches $ 9
- 1992 Winter Olympics $32
- ABC Boxing $32
- ABC Mon Night $34
- All American College Fb $36
- All Star Sports Pak $34
- APBA Baseball $28
- APBA Encyclopedia $34
- APBA General Manager $29
- APBA Micro Manager $32

- LH 3 in 1 Football $30
- LH Boxing $30
- LH College Basketball $30
- LH Full Count Baseball $30
- LH Hockey $30
- LH Pro Basketball $30
- LH Team Disks $15
- LH League Leaders $15
- LH Utility Disks $15
- Links Golf $37
- Links Golf WIN $39
- Links Course 1 -6 Ea $17

- Cohort $34
- Conflict: Korea $37
- Conflict: Middle East $37
- Conflict in Vietnam $ 9
- Decision at Gettysburg $29
- Dreadnoughts $42
- Dreadnoughts: Bismark $29
- Dreadnoughts: Ironclads $29
- Fall Gelb $36
- Fifth Eskadra $36
- Fire Brigade $34
- Fleet Med $36
- German Raider Atlantis $26
- Gettysburg:Turning Pnt $37
- Golan Front $36
- Grand Fleet $36
- Great Naval Battles $42
- Grey Seas, Grey Skies $36



'SIEGE' is a medieval style castle assault game. You are given four castles to attack and defend in a one castle scenario or an extended campaign. Includes historical troops (French, English, Celtic), mythical troops (Elves, Trolls, Giants), siege towers, battering rams, catapults, and oil. **$38**



'HEROS OF THE 357th' is a WWII air combat simulation. You are asked to become a member of the 357th, an elite force of P-51D mustang pilots. Fly actual combat missions; fighter sweeps, escort US bombers, drop bombs & rockets during ground attacks, & intercept V-1 Buzz bombs over England. **$32**

- Links 386 Pro $42
- Links 386 Course Disks $20
- Low Blow $12
- Madden Football $21
- Madden TD 89 & 90 $18
- Madden Football 2 $32
- Magic Johnson Fst Brk $ 6
- Mario Andretti Racing $17
- ML Basbll Mngr's Chllng $19
- ML World Series Disks $17
- ML TD 1982 - 1990 Ea $17
- ML All Stars $17
- ML Franchise Disks Ea $20
- ML Basketball $28
- ML Personal Pro Golf $28
- ML Football Deluxe $39
- Michael Jordan Flt Sim $44
- Mike Ditka Football $32

- Halls of Montezuma $24
- Harpoon $25
- Harpoon Set 2 or 3 $19
- Harpoon Set 4 $24
- Harpoon Editor $27
- Harpoon Challenger Pak $42
- In Harms Way $36
- Kampfgruppe $37
- Kriegsmarine $36
- Kursk Campaign $36
- Long Lance $36
- MacArthur's War $29

- To The Rhine $36
- Typhoon of Steel $12
- UMS 2 $19
- UMS 2 Civil War $24
- UMS 2 Desert Storm $24
- UMS 2 Planet Editor $28
- V for Victory $38
- War in the Falklands $26
- Warship Changed Hist $26
- Waterloo $12
- Western Front $37
- White Death $29

- Nuclear War $12
- Objection $34
- Objection Enh $89
- Ogre $19
- Omega $30
- Operation Combat $15
- Overlord $29
- Pacific Theater of Oper $42
- Perfect General $34
- Perfect General Disk 2 $23
- Populous $21
- Populous Promise Land $14

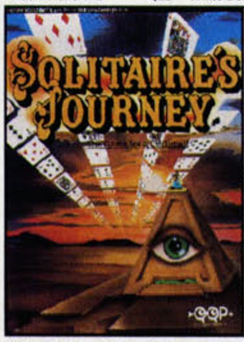
- Eco Quest 1 $34
- Felony $12
- Free DC $29
- Future Wars $19
- Galleons of Glory $29
- Gamma Force $ 9
- Gateway $29
- Geisha $32
- Godfather $34
- Gold Rush $15
- Grail Quest $27
- Hare Raising Havoc $32

- Sierra Adventure Bundle $39
- Shogun $12
- Sinbad $12
- Snoopy $ 9
- Space Quest 1 $34
- Space Quest 2 $28
- Space Quest 3 or 4 $34
- Space Quest 5 $39
- Space Quest Bundle $39
- Spellcasting 101 $19
- Spellcasting 201 $36
- Startrek 5 $12

- Hoyle's Games 4 $29
- Ishido $34
- Jeopardy 1 or 2 $10
- Jigsaw Pinups $24
- Jones in the Fast Lane $24
- Living Jigsaws $12
- Lexicross $24
- Monopoly $24
- Omar Sharif on Bridge $37
- Penthouse Jigsaw $24
- Pictionary $24
- Pinball WIN $29

- APBA Stat Master $29
- APBA Wizard $29
- APBA 1908 - 91 Ea $21
- APBA Basketball $28
- APBA Bowling $19
- APBA Football $49
- Basketball Challenge $28
- B ball Ch. 1987 - 88 Ea $13
- B ball Ch. 1989 - 90 Ea $17
- Bo Jackson Baseball $32
- Blades of Steel $26
- Cycles Grand Prix $28

- Mini Putt $ 9
- NASCAR Challenge $31
- NFL Challenge $60
- NFL 1984 - 1987 Ea $15
- NFL 1988 - 1991 Ea $22
- NFL Preseason Disk $22
- NFL All Star Teams $22
- NFL College Alumni $22
- NFL College Teams $19
- NFL Dream Teams $20
- NFL Greatest Teams $22
- NFL Roster Editor $20



'SOLITAIRE'S JOURNEY' is a complete solitaire program. Choose from 105 of the world's most popular solitaire games. Features tournament play which allows you to create your own, keeps a complete history & overall averages for each game, 4 intriguing quests are included, & several play levels. **$36**

- Populous 2 $38
- Power Monger $34
- PowerMonger WW1 $21
- Project Moonbase $24
- QQP Bundle $59
- Railroad Empire $34
- Railroad Tycoon $34
- Rampart $27
- Reach for the Stars 3 $19
- Realms $29
- Renegade Legion Intrcpt $12
- Revolution 76 $29
- Rider of Rohan $19
- RoboSport WIN $37
- Romanc 3 Kngdm 1or2 $42
- Rules of Engagement $37
- Second Conflict WIN $34
- Siege $38



The 'THUNDER BOARD' is a sound board that is 100% compatible with Soundblaster and Adlib. It reproduces digitized sounds using an 8 bit DAC. Features include dynamic filtering, 11 Voice FM music synthesizer, sampling rate up to 22 KHz, microphone input, joystick port, and a 2 watt power amplifier. **$84**

- Planet of Lust $24
- Price is Right $15
- Prime Time Hits 1 or 2 $25
- Rack'em $12
- Risk $24
- Risk WIN $29
- Sargon 4 or 5 $34
- Scrabble $24
- Scrabble Deluxe $34
- Shanghai 2 $24
- Shogi Master $34
- Solitaire Royale $19
- Solitaires Journey $36
- Sorry $15
- Spot $15
- Stratego $31
- Strip Poker 3 $31
- Strip Poker Data 1-5 Ea $19



'MIGHT AND MAGIC 3' is the latest in the Might & Magic roleplaying series. Features an elaborate world in which to adventure, thousands of illustrated inhabitants, stunning music, sound effects & speech, automatic help with pop-up maps. Includes full color map of the Isles of Terra. **$37**

- Main Bttle Tank C Grm $36
- Main Bttle Tank N Grm $36
- Main Bttle Tank ME $36
- Malta Storm $36
- Man of War $36
- Mare Nostrum $36
- Marianas Turkey Shoot $28
- Midway $26
- Moscow Campaign $36
- North & South $27
- Northern Fleet $36

IBM STRATEGY

- A Train $42
- Ancient Art War $29
- Ancient Art War at Sea $29
- Ancient Art War in Sky $34
- Armada 2525 $26
- Bandit Kings of China $37
- Battle Isle $32
- Big Business $32
- Breach 2 Enhanced $19
- Breach 2 Scenario Disk $15

- Sim Ant $37
- SimCity $29
- SimCity for Windows $37
- SimCity Graphic 1 or 2 $23
- SimCity Terrain Editor $15
- SimEarth DOS/WIN $41
- Star Control $29
- Star Control 2 $37
- Starfleet 1 or 2 $38
- Strategic Forces $19
- Sword of Aragon $28

- Harley Davidson $12
- Heart of China $34
- Hostage $ 9
- Hound of Shadow $17
- Indy Jones L Crsd ega $21
- Indy Jones L Crsd vga $27
- Indy Jones Fate Atlantis $38
- Jack the Ripper $38
- James Bond Stealth Aff $34
- King's Quest 1Enhncd $34
- King's Quest 2 or 3 $28

- Startrek 25th Aniversry $36
- Time Quest $19
- Train $ 6
- Uninvited $ 9
- Universe 1 -3 Ea $34
- War in Middle Earth $15
- Where Amrcas Pst CSD $37
- Where Europe CSD $30
- Where USA CSD $30
- Where World CSD $27
- Where World CSD Dlx $49

- Super Jeopardy $27
- Super Tetris $32
- Tetris $24
- Trivial Pursuit $26

IBM ADVENTURE

- Where Time CSD $30
- Wierd Dreams $12
- Wonderland $19
- Zak McKracken w/HB $18
- Zeliards $21
- Zombie $12

- Daily Double Horse $19
- Days of Thunder $24
- Dirk's Baseball Encyclpd $19
- Fast Break $ 9
- Games Winter Chllng $34
- GFL Champ Football $ 9
- Grand Prix Circuit $12
- Greens $34
- Greg Norman Shark Att $25
- Gretsky Hockey 2 $34
- Gretsky League $26

- NFL Situation Editor $20
- NFL Football $31
- NFLP roleague Football $24
- Nicklaus Signature Edit $39
- Nicklaus SE Clip Art $24
- Nicklaus Greatest 18 $27
- Nicklaus Unlimited Golf $27
- NG Clip Art $17
- NG Course 2, 3, 4, or 5 $15
- Over the Net Volleyball $24
- Pete Rose Baseball $ 9

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PGA Tour Golf WIN $38
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Pro Tennis Tour 2 $32
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Reel Fish'n $12
Serve & Volley $12

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Lost in LA $10
LucasArts Adventure $16
Magic Candle 1 or 2 $10
Manhunter NY or SF $10
Maniac Mansion $10
Martian Dreams $13

IBM AD & D
AD&D Bundle $38
Champions of Krynn $20
Curse of Azure Bonds $15
Dark Queen of Krynn $32
Death Knights of Krynn $20
Dragon Strike $12
Dragons of Flame $ 9
Eye of the Beholder $32
Eye of the Beholder 2 $38
Gateway Savge Frontr $32
Heroes of the Lance $12
Pool of Darkness $38
Pool of Radiance $15
Secret of Silver Blades $15
Shadow Sorcerer $32
Tales Magic: Prophcy S $38
Treasurs Savage Frontr $32
War of the Lance $ 9

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Pirates $ 9
Planet's Edge $37
Prophecy 1 $12
Questron 2 $12
Rings of Medusa $24
Sea Rogue $39
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Sleeping Gods Lie $29
Sorcerian $34

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Day of the Viper $19
D Generation $32
Dig Dug $ 6
Dr Doom's Revenge $ 9
Dragon's Lair 1 $24
Dragon's Lair 2 $34
Drgn's Lair Singe Cstl $34
Freakn Funky Fuzzballs $19
Galaxian $ 6

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TMNT Arcade $31
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Troika $19
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Viking Child $32
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Wild Wheels $32
Wrath of the Demon $29
Xenocide $19
X Men 1 $ 9
X Men 2 $25

IBM SIMULATION
Flight of the Intruder $22
Flight Simulator 4.0 $39
Aircraft Scenry Design $35
Flight Planner $24
New Facilities Locator $27
Sound, Graphics Upgrde $27
Sublogic Scenery Disks $22
Fly Grand Canyon 3D $45
Gunboat $33
Gunship $12

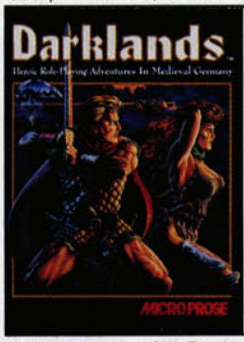
IBM SIMULATION
S Weapons Exp3 He162 $21
S Weapons Exp4 Do335 $21
Shuttle $34
Silent Service 2 $34
Stormovik $15
Strike Aces $19
Strike Commander $45
Stunt Driver $15
Tank $37
Team Yankee $34



'DREADNOUGHTS' is a WWI surface fleet battle simulator. It recreates the look, specificatons, and tactics of fleet combat. Features 3D views, comprehensive manuals and sea charts, a potent English command parser, one or two player mode and computer controlled ships, gunnery and damage control. **$42**



'BUZZ ALDRIN'S RACE INTO SPACE' is a computer simulation of man's greatest adventure, the race to the moon. You may choose from the entire space inventories of the USA & USSR. Determine which hardware to research & schedule individual space missions. Uses digitized historical footage. **$37**

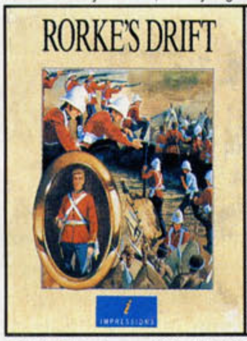


'DARKLANDS' draws upon the lore, myths & superstitions of medieval Germany to create a realistic fantasy role-playing game. A new menu system that provides more traditional rpg options than ever before. Characters fight in real time combat to develop skills that allow them to grow and develop. **$39**

IBM ROLE PLAYING
2400 AD $28
Autoduel $26
Bad Blood $31
Bard's Tale 1 $15
Bard's Tale 2 $19
Bard's Tale 3 $31
Bard's Tale Cnstrctn St $19
Battletech 1 $12
Battletech 2 $31
Blade Warrior $12
Bloodwych $15
Buck Rogers 1 $30
Buck Rogers 2 $32
Captain Blood $ 9
Captive $30
Celtic Legends $32
Champions $37
CHARACTR EDITORS $16
Conan $29
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Cybergenic Ranger $32
Cyber Space $29
Darklands $39
Drakkhen $37
Dragon Wars $12
Dusk of the Gods $38
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Elvira 1 Mistress Dark $34
Elvira 2 Jaws Cerberus $39
Escape from Hell $17
Fire King $19
Flames of Freedom $28
Fountain of Dreams $15
Four Crystals of Trazere $32
Hard Nova $17
Hero's Quest 1 EGA $21
Hero's Quest 1, 2 or 3 $34
Hyperspeed $34
Immortal $17
Keys to Maramon $12
King's Bounty $19
Knights of Legend $30
Legacy of the Necromncr $29
Legend $31
Lord of the Rings 1 $34
Lord of the Rings 2 $37
Loremaster $39
Lure of the Temptress $37
Magic Candle 1 $15
Magic Candle 2 $37
Matrix Cubed $32
Mechwarrior $34
Megatraveller 1 $16
Megatraveller 2 $19
Megatraveller 3 $39
Midwinter 1 $12
Midwinter 2 $28
Might & Magic 1 or 2 $12
Might & Magic 3 $37
Might & Magic 4 $39
Mission Impossible $19
Murder $29
Space 1889 $16
Space Inc $34
Space Rogue $30
Space Wrecked $19
Spellbound $39
Spirit of Excaliber $19
Starflight 1 or 2 $19
Sword of the Samurai $ 9
Swrd Samrai & Pirates $16
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Third Courier $ 6
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Ultima Savage Empire $34
Ultima Trilogy $35
Ultima Trilogy 2 $45
Ultima 1-6 Bundle CD $59
Ultima 4 or 5 $35
Ultima 6 False Prophet $39
Ultima 7 Black Gate $45
Ultima Stygian Abyss $48
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Wizardry 4 $19
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Wizardry 6 Cosmic Frg $37
Wizardry 7 Crusaders $39

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Ski or Die $15
Sport of Kings $15
Super Car Pack $37
Team Suzuki $15
Tennis Cup $32
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TKO Boxing $ 6
Tom Landry Football $29
Tony LaRussa Basebll $29
T LaR Fantasy Managr $15
T LaRussa Stadiums $15
T LaR Teams1901-68 $15
Weaver Baseball 2.0 $32
Weaver 1988 - 1989 Ea $16
Weaver Commisnr 2.0 $21
Weaver 2.0 1990 Teams $16
Weaver 2.0 Comm Edt $56
World Circuit $34
World Class Soccer $28

HINT BOOKS
Advnturs Willy Beamish $10
Altered Destiny $10
A Train $16
Bard's Tale 1 - 3 Ea $10
Buck Rogers 1 or 2 $10
Castle of Dr Brain $10
Champions of Krynn $10
Civilization $16
Code Name Iceman $10
Colonel Bequest 1 or 2 $10
Conquests of Camelot $10
Conquests of Longbow $10
Curse of Azure Bonds $10
Death Knights of Krynn $10
Dragon Wars $10
Drakkhen $10
Dynamix Great War Pln $16
Elvira 1 or 2 $10
Eye of Beholder 1 $10
Eye of Beholder 2 $12
Fountain of Dreams $10
Free DC $10
Gateway Savage Frntr $10
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Indy Jones Fate Atlantis $10
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King's Quest 1 - 5 Ea $10
Matrix Cubed $10
Might & Magic 1 or 2 $10
Might & Magic 3 or 4 $16
Planet's Edge $16
Police Quest 1 - 3 Ea $10
Pool of Darkness $12
Pool of Radiance $10
Populous 1&2 Officl Str $16
Power Monger $10
Power Mngr Strategy Bk $16
Quest for Clues 2, 3or4 $21
Quest for Glory 1-3 Ea $10
Railroad Tycoon $10
Rise of the Dragon $10
Run 5 Issue 1 - 20 Ea $ 6
Savage Empire $10
Secret Mnky Islnd 1or 2 $10
Secret of Silver Blades $10
Shadow Sorcerer $10
Simcity/Simearth $20
Simearth $10
Space Quest 1 - 4 Ea $10
Starflight 1 or 2 $10
Star Trek 25th Anniv $10
Strategy Plus 3 -11 Ea $ 8
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Treasures Savage Frntr $10
Tunnels & Trolls $16
Ultima 4 - 7 Ea $10
Ultima 4 Avatar Advntures $14
Ultima 7 & Underworld $16
V for Victory $16
Wizardry 6 Cosmic Frg $12
Wizardry 7 Crusade $12
Yeager's Air Combat $16



'RORKE'S DRIFT' is a detailed simulation of the battle between 137 British soldiers & 4000 Zulu warriors that took place Jan 22 1879. You control each man, standing, sitting, prone, aiming, firing, reloading, running or walking. With 3D map, animated combat & movement mouse support & VGA. **$34**

IBM ACTION /ARCADE
Gauntlet 1 or 2 $ 9
Golden Axe $17
Gold of the Aztecs $29
Grave Yardage $12
Gremlins 2 $ 9
Guy Spy $29
Hard Driving 2 $38
Hare Raising Havoc $32
Home Alone $27
Killing Cloud $19
Knight Force $29
Lemmings $32
Lemmings Data Disk $19
Light Corridor $29
Light Quest $32
Loopz $24
Marble Madness $15
Monty Python $15
Ms Pac Man $ 6
M.U.D.S. $16
Mystical $27
Nevermind $25
Night Breed $15
Night Shift $17
Nova 9 $21
Obliterator $ 6
Oil's Well $19
Pac Man $ 9
Pick N Pile $27
Pipe Dream $19
Pitfighter $22
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Rotox $24
Savage $19
Sierra Arcade Bundle $24
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Space Ace 1 or 2 $34
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Speedball 2 $25
Stellar 7 $21
Stormlord $ 9
Super Off Road $15
Super Pac Man $ 9
Super Space Invaders $25
Taking of Beverly Hills $27
Teenage Mtnt Nnja Trtl $25

IBM ACTION /ARCADE
Airborne Ranger $12
Amazing Spiderman $ 9
Arachnaphobia $28
Armor Alley $27
Artura $ 6
Back to the Future 2or3 $15
Barbarian $ 9
Bart Simpsn House Wrd $31
Battle Master $37
Battlestorm $32
Bill & Ted's Excllnt Adv $19
Blockbuster $ 6
Blockout $28
Blood Money $28
Brain Blaster $28
Budokan $17
Colorado $ 6
Continuum $29
Cool Croc Twins $24
Crackdown $17

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Ad Lib Sound Card $59
Ad Lib Gold 1000 $179
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Adlib Surround Sound $64
Adlib Telephone Module $64
Ad Lib Visual Composr $75
Ad Lib Speakers $15
Flight Stick $43
Flight Stick w Falcon $46
Game Card 3 $39
Gravis Ultraound Board $149
Champ Joystick $24
Maxx Control Yoke $59
Rudder Peddals $39
Mouse 3 Button $29
Sound Blaster $109
Sound Blaster Pro $189
Snd Blaster Speakers $15
Snd Blaster Voice Edtr $54
Sound Star Snd Board $34
Thrustmaster Joystick $69
Thrustmstr Pro Joystick $109
Thrustmstr Weapn Cntrl $79
Thunder Board SndBrd $84
Thunder Board Spkrs $15

IBM SIMULATION
Gunship 2000 $39
Harrier Combat Sim $ 6
Heatwave $25
Heros of the 357th $32
Hoverforce $15
Hunt for Red October $22
Hyperspeed $34
Jet Fighter 2.0 $39
Knights of the Sky $29
Land, Sea & Air Bundle1 $39
Land, Sea & Air Bundle2 $39
LHX Attack Chopper $26
Team Yankee 2 $29
Test Drive 2: Collection $34
TD2 Data Disks 1-4 Ea $15
Test Drive 3 $32
TD3 Road & Car Disk $19
TFH & BH1942 $44
Thunderhawk $29
Thunderstrike $27
Top Gun Danger Zone $31
Tracon $34
Tracon 2 $29
Tracon 2 WIN $34
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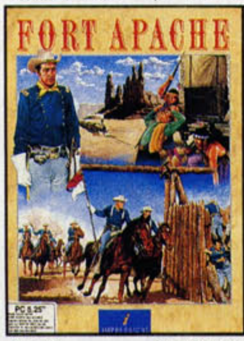
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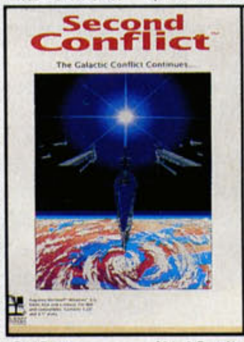
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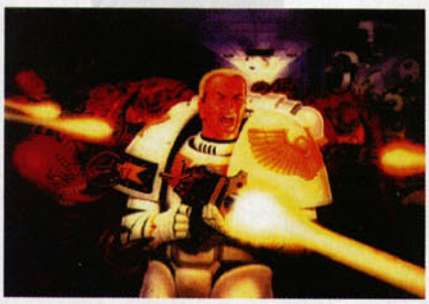


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Over There

Fly the Flag

by Paul Rigby



Space Crusade Cover Art



Space Crusade

Developed by **Envision** for **Gremlin**, *Flag* returns to the times of wizards and all that jazz. Picture a planet operated by wizards in which the game of *Flag* is used to settle all differences, employing two zombie armies to do all of their fighting for them.

The player is an evil wizard who decides that he wants to take over the entire planet. To do so the player uses the right to call the other wizards to play in a game of *Flag*. Canny, eh?

There are 10 opponents, but one must triumph four times (levels) over each to win, resulting in 40 levels (there are extra levels for special occasions). If the player beats the 10 opponents, the planet is secured. "The objective is for one of your men to touch the enemy flag and vice-versa; the flag can be placed anywhere you like," said Envision programmer Ian Harling.

Flag is presented in full-screen isometric 3D and offers multi-directional scrolling. Units are all created or 'bought' using limited gold reserves at the start. Soldiers are the basic unit, cannon fodder used just for fighting with basic spears. Other units exist, such as bombardiers who can blow up walls erected by the player as barriers, ninjas (handy for destroying buildings) and a dragon who will fry soldiers. Magic completes the offensive picture. Amongst all of this is the importance of certain buildings (which provide gold, soldiers and so on) within the stockade such as the treasury, the barracks and the merchant's house.

"The joy of *Flag* is the control system, because we have got a 'tagging multi-system,' issuing multiple commands to one or a group of soldiers," enthused Harling. "The multitude of possible strategies and the need to think ahead by several moves gives the game a 'chess' feel." Multi-player, modem and network features may all be included. The Amiga version of *Flag* should be out now with the PC version appearing around fall.

Drugs. The stuff is never out of the news in one form or another. Now it is the subject of a new game from **Microprose UK** and **Vektor Grafix** (creators of *Shuttle*). Called *ATAC*, it is essentially a strategy-based flight simulation. *ATAC*, set in the near future, is about the war against drugs with Central America as the scenario. Microprose decided that one way to combat the drug menace would be to hit the drug barons financially. Microprose UK's Steve Perry explains, "You find where they are growing the stuff — destroy it, where they are processing the stuff — destroy it, where they are transporting the stuff — destroy the transport. Just keep hitting them where it hurts until they go bust. From that we developed the concept of, not so much a flight simulator, but a strategy game."

The player of the game is "... the commander of a covert force that is situated somewhere in the jungle," commented Perry, "at a small airstrip with a limited number of aircraft: helicopters (a generic type based on the Apache) and F-22 ATFs (which will be old-fashioned technology by then)."

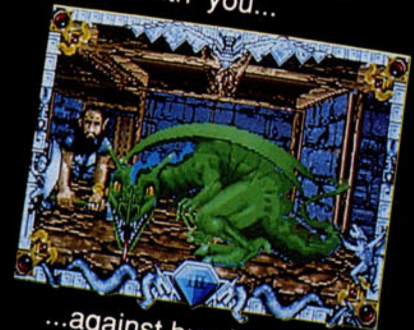
The player has a number of pilots who, unlike the aircraft, *cannot* be replaced. One can fly four units in the air at any time: aircraft, helicopters or a mix. In addition, there are spies on the ground, some on the player's side and others who may be double agents. They supply information that is collated into a folder that can be read on-screen. On the basis of this information, missions are decided upon. This is a departure for Microprose, who normally structure their flight simulations with planned missions. PC and Amiga release is scheduled for August.

Stand by for a UK challenger to the graphic adventure genre from **Revolution Software**, via **Virgin**, called *Lure of the Temptress (LOT)*. As the unwilling hero, the player must defeat the Enchantress who's taking over the town. Revolution's Charles Cecil explains how *LOT* came into being. "I used to work at **Activision** till its demise. While I was there we used to ship **Sierra** product. It occurred to me that the engine Sierra were using was, and still is, outdated. They introduced it five years ago and really haven't developed it. However, we have looked at Lu-

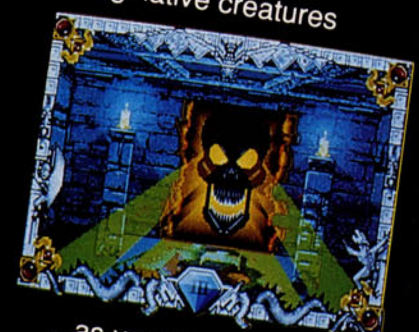




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casfilm's *Monkey Island* programs and we now have them in our sights."

What Revolution have developed is a system called Virtual Theatre. Features include a 'real world' where characters wander around as if they really exist. Characters follow day-to-day routines — a smaller, similar, version of that used in *Ultima VI*.

Another principle feature of Virtual Theatre is intelligent characters. One can string together complicated commands using the 'Tell' feature and certain 'servant' characters. In fact, certain puzzles require the assistance of NPCs to solve them. Another plus for the Revolution system is something called 'autorouting'. This means that an independent character can walk from one point in the room to another and if somebody or something gets in his way then he mathematically works out the best way of walking around it using an algorithm, rather than the "tram-line" system used by **Lucasfilm, Sierra** and **Delphine**. Include a boast that *LOT* has no blind alleys and that this graphic adventure is the first to offer "true" character interaction and object manipulation, and the Amiga and ST versions (out now) seem like "must buys."

Finishing off this month's column are quick mentions for two new games. **Gremlin's** *Space Crusade* (based on the Games Workshop boardgame) has been produced by the same developers who produced *HeroQuest*. Presented in isometric and overhead viewpoints, this action/strategy game with RPG overtones is available for IBM, Amiga and ST. *Space Crusade* asks the player to control a commander and four marines through a variety of missions.

Finally, described as "*Lemmings* with missions," *Rookies*, from **Virgin**, allows the player to take control of a number of armed soldier-units over a variety (30 plus) of missions/levels that include desert and snow-scapes. Although there are definite tactical elements to the game, the *Lemmings* atmosphere is ever-present.

Incidentally, anyone who would like to contact this writer can do so on **CompuServe** (75300,1503) or by mail to 20 Malvern Road, Liverpool, England, L6 6BW. Please include three international reply coupons for a reply.

Note: The above games, and any of the other games mentioned in "Over There" in past issues, can be obtained from:

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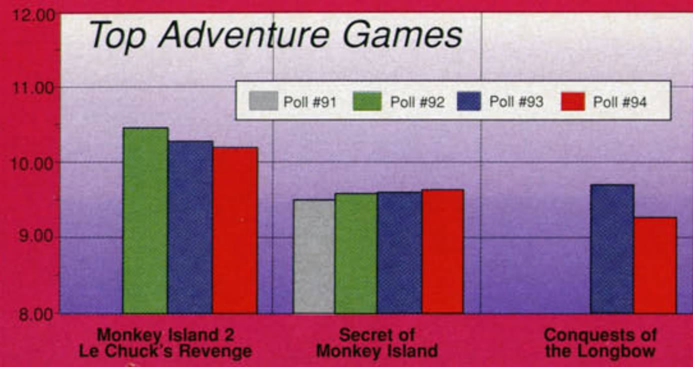
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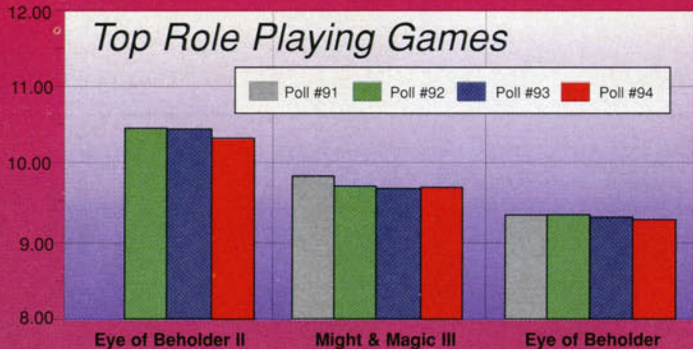
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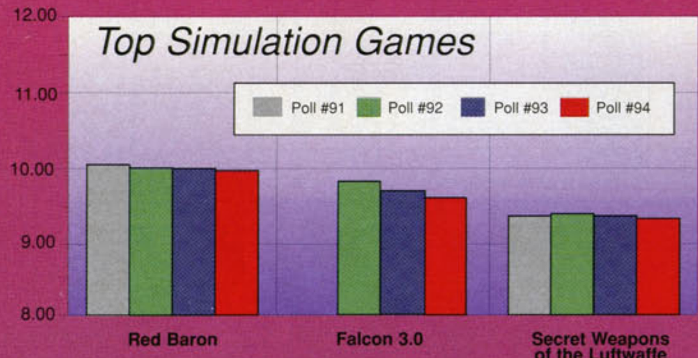
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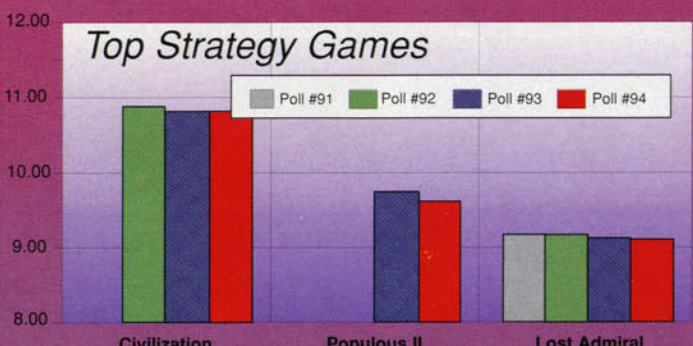
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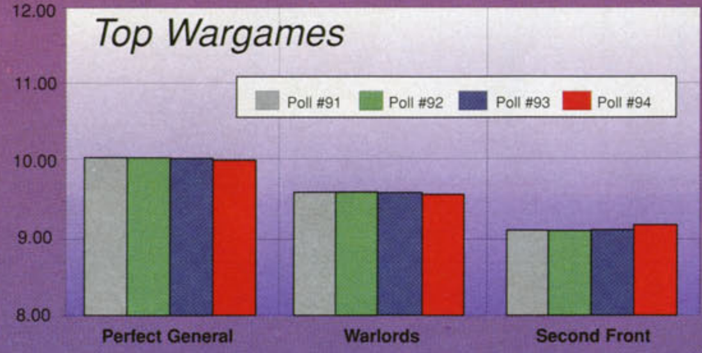
Top 100 Games

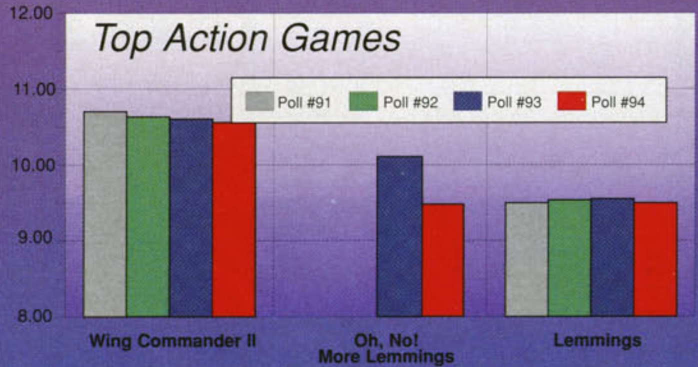
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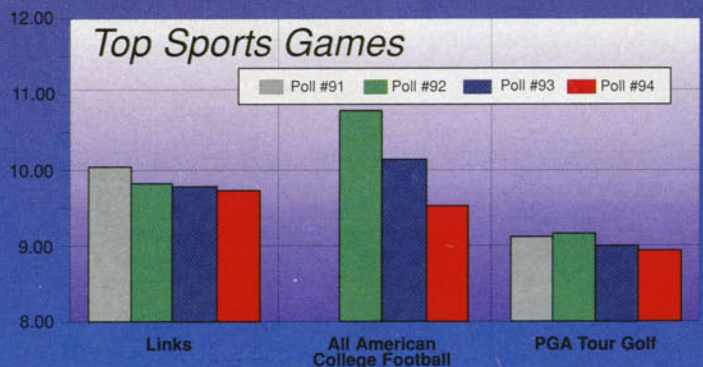
COMPUTER GAMING WORLD

The Magazine of Interactive Entertainment

No.	Name	Source	Category	Rating
1	Civilization	Microprose	ST	10.84
2	Wing Commander II	Origin	AC	10.58
3	Eye of the Beholder II	SSI	RP	10.29
4	Monkey Island 2: Le Chuck's Revenge	Lucasfilm	AD	10.19
5	The Perfect General	QQP	WG	9.98
6	Red Baron	Dynamix	SI	9.96
7	Links	Access	SP	9.71
8	Might & Magic III	New World Computing	RP	9.68
9	The Secret of Monkey Island	Lucasfilm	AD	9.65
10	Falcon 3.0	Spectrum Holobyte	SI	9.64
11	Populous II	Electronic Arts	ST	9.63
12	Warlords	SSG	WG,ST	9.57
13	All American College Football	Micro Sports	SP	9.53
14	Lemmings	Psygnosis	AC	9.49
	Oh, No! More Lemmings	Psygnosis	AC	9.49
16	Secret Weapons of the Luftwaffe	Lucasfilm	SI	9.35
17	Eye of the Beholder	SSI	RP	9.28
18	Conquests of the Longbow	Sierra	AD	9.27
19	Wings	Cinemaware	AC	9.21
20	Second Front	SSI	WG	9.16
21	Gunship 2000	Microprose	SI	9.12
22	Quest for Glory II	Sierra	AD,RP	9.11
23	The Lost Admiral	QQP	ST	9.10
24	Silent Service II	Microprose	SI	9.08
25	No Greater Glory	SSI	WG	9.07
26	Chuck Yeager's Air Combat	Electronic Arts	SI	9.06
27	Bane of the Cosmic Forge	Sir-Tech	RP	9.05
	Battlehawks 1942	Lucasfilm	AC,SI	9.05
29	Red Storm Rising	Microprose	SI	9.04
30	Police Quest 3	Sierra	AD	9.03
31	Ultima V	Origin	RP	9.00
	Quest for Glory	Sierra	RP	9.00
33	Space Quest IV	Sierra	AD	8.98
	Western Front	SSI	WG	8.98
35	Space Quest III	Sierra	AD	8.97
	Sword of Aragon	SSI	WG,ST	8.97
	F-117A	Microprose	SI	8.97
38	Mech Warrior	Activision	ST,SI	8.96
	Powermonger	Electronic Arts	ST	8.96
	The Adventures of Willy Beamish	Dynamix	AD	8.96
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43	Pools of Darkness	SSI	RP	8.94
44	Overrun	SSI	WG	8.93
45	Shuttle	Virgin	SI	8.91
46	Falcon	Spectrum Holobyte	SI	8.90
47	Command HQ	Microplay	WG,ST	8.89
	Jack Nicklaus Unlimited Golf	Accolade	ST	8.89
	Rise of the Dragon	Dynamix/Sierra	AD	8.89
	Martian Dreams	Origin	RP	8.89







	Martian Memorandum	Access	AD	8.89
52	NFL Challenge	XOR Corporation	ST	8.87
	4-D Boxing	Electronic Arts	SP	8.87
	Wayne Gretyzky Hockey II	Bethesda Softworks	SP	8.87
55	Romance of the 3 Kingdoms	Koei	ST,RP	8.86
	Super Tetris	Spectrum Holobyte	AC,ST	8.86
57	Indianapolis 500	Electronic Arts	SP	8.85
58	Populous	Electronic Arts	ST	8.84
59	Elvira	Accolade	RP	8.82
60	Might & Magic II	New World	RP	8.81
	Rules of Engagement	Mindcraft	ST	8.81
	Tracon	Wesson International	ST	8.81
63	The Magic Candle	Mindcraft	RP	8.80
64	Gateway to the Savage Frontier	SSI	RP	8.79
65	Hoyle Book of Games, Vol. 3	Sierra	ST	8.78
66	Bard's Tale III	Electronic Arts	RP	8.77
	Megafortress	Three-Sixty	SI,ST	8.77
68	Bandit Kings	Koei	ST,RP	8.75
	Heart of China	Dynamix	AD	8.75
70	Covert Action	Microprose	AC,AD	8.73
71	Battles of Napoleon	SSI	WG	8.72
	Battlechess	Interplay	ST	8.72
73	Breach 2	Omnitrend	ST,RP	8.71
	Starflight II	Electronic Arts	RP	8.71
75	Neuromancer	Interplay	AD	8.70
76	F-15 Strike Eagle II	Microprose	SI	8.69
77	Action Stations	RAW Entertainment	WG	8.68
78	Typhoon of Steel	SSI	WG	8.67
	Curse of the Azure Bonds	SSI	RP	8.67
80	NFL Pro League Football	Micro Sports	SP	8.66
81	Indiana Jones/Graphic Adv.	Lucasfilm	AD	8.65
	Ballistyx	Psygnosis	AC	8.65
83	Armada 2525	Interstel	ST	8.63
84	Wayne Gretzky Hockey	Bethesda	AC,ST	8.62
85	Pool of Radiance	SSI	RP	8.61
86	Tony LaRussa's Ultimate Baseball	SSI	SP	8.60
87	King's Quest IV	Sierra	AD	8.59
	Wide World of Sports Boxing	Data East	SP	8.59
89	Buck Rogers	SSI	RP	8.57
90	Chessmaster 2100	Software Toolworks	ST	8.56
	Conan the Cimmerian	Virgin	AC,RP	8.56
92	Genghis Khan	Koei	ST,RP	8.54
93	Future Wars	Interplay	AD	8.53
94	Panzer Strike	SSI	WG	8.51
	Leisure Suit Larry III	Sierra	AD	8.51
	Sword of the Samurai	Microprose	ST,RP	8.51
97	The Games: Winter Challenge	Accolade	SP	8.50
98	Savage Empire	Origin	RP	8.48
99	Champions of Krynn	SSI	RP	8.45
	Jetfighter II	Velocity	SI	8.45

The Computer Gaming World Poll

A monthly survey of the readers of Computer Gaming World Magazine.

Prepared by Golden Data Services.

PC Research Hit Lists of Top-Selling Software

March, 1992

PC Games (MS-DOS)

Rank	Title and Source
1.	Star Trek 25th Anniversary (Interplay)
2.	Civilization (Microprose)
3.	Falcon 3.0 (Spectrum Holobyte)
4.	Police Quest 3 (Sierra On-Line)
5.	F-117A Stealth Fighter 2.0 (Microprose)
6.	Robin Hood: Conquest of the Longbow (Sierra On-Line)
7.	SimCity (Maxis)
8.	Links (Access)
9.	Leisure Suit Larry V (Microprose)
10.	Flight Simulator 4.0 (Microsoft)
11.	King's Quest V (Sierra On-Line)
12.	Ultima Underworld (Origin)
13.	SimAnt (Maxis)
14.	Secret Weapons of the Luftwaffe (Lucasfilm)
15.	Wing Commander II (Origin)
16.	Lemmings (Psygnosis)
17.	Flight Simulator Upgrade (Mallard)
18.	Magic Candle II (Mindcraft)
19.	Gateway to the Savage Frontier (Strategic Simulations)
20.	Wing Commander Deluxe (Origin)

Amiga Games

Rank	Title and Source
1.	Populous II (Bullfrog Productions)
2.	Lemmings (Psygnosis)
3.	Castles (Interplay)
4.	Out of this World (Interplay)
5.	Lost Treasures of Infocom (Activisionn)

Macintosh Games

Rank	Title and Source
1.	SimAnt (Maxis)
2.	Flight Simulator (Microsoft)
3.	Where in the World is Carmen Sandiego? (Broderbund)
4.	Spectre (Velocity)
5.	SimCity (Maxis)

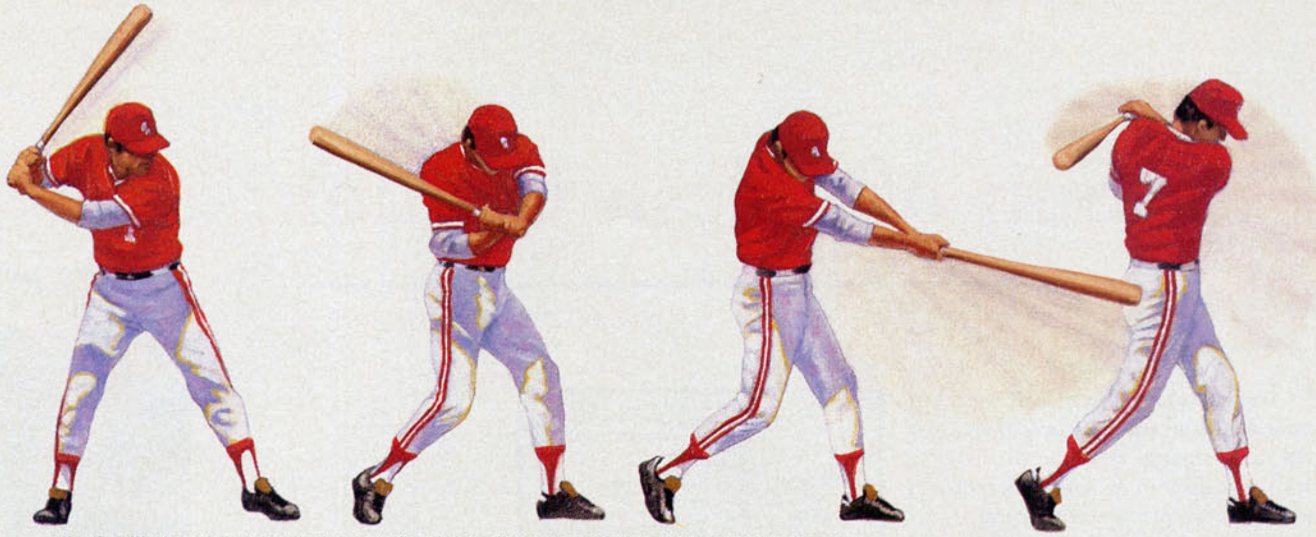
Home Education (MS-DOS)

Rank	Title and Source
1.	Where in the World is Carmen Sandiego? (Broderbund)
2.	Mavis Beacon Teaches Typing (Software Toolworks)
3.	Where in the U.S.A. is Carmen Sandiego? (Broderbund)
4.	The New Math Blaster Plus (Davidson)
5.	Treehouse (Broderbund)
6.	Where in Time is Carmen Sandiego (Broderbund)
7.	Playroom (Broderbund)
8.	Where in America's Past is Carmen Sandiego? (Broderbund)
9.	Reader Rabbit I (Learning Company)
10.	Kid Pix (Broderbund)

This list is based on units sold by Software Etc., Babbages, Waldensoftware and Electronics Boutique. For more information, please contact PC Research at (703) 435-1025. CGW

Computer Gaming World's Hall of Fame

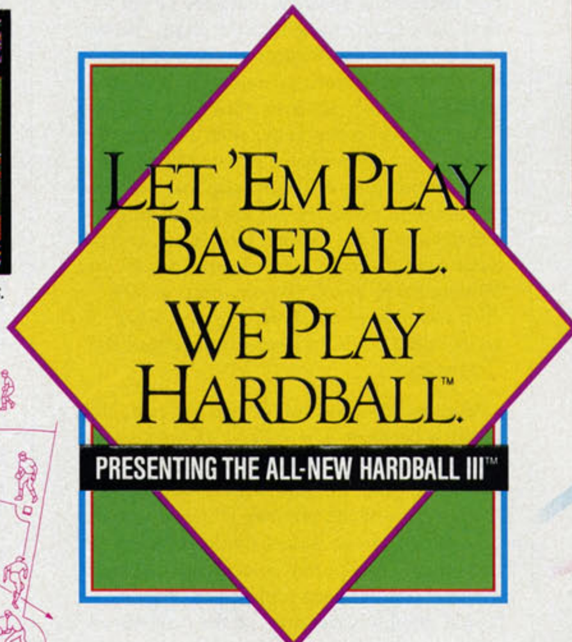
Bard's Tale I	Gunship	Mech Brigade	SimCity	Ultima VI
Chessmaster	Harpoon	Might & Magic	Starflight	War in Russia
Dungeon Master	Kampfgruppe	M.U.L.E.	Their Finest Hour	Wing Commander
Earl Weaver Baseball	King's Quest V	Pirates	Ultima III	Wizardry
Empire	M-1 Tank Platoon	Railroad Tycoon	Ultima IV	
F19 Stealth Fighter				
Gettysburg				



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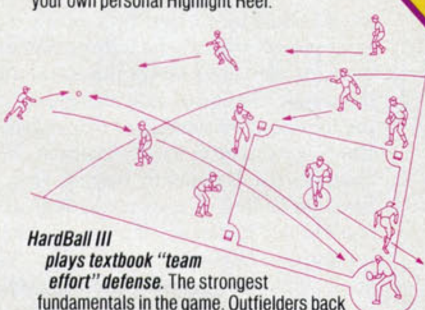


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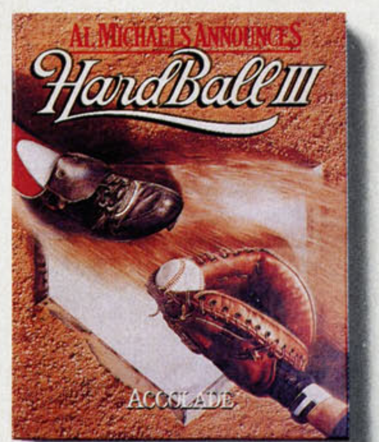
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Circle Reader Service #46

Son of "Flesh Gordon?"

Infocom's Leather Goddesses of Phobos 2

by Chris Lombardi

1930. Upper Sandusky, Ohio. A lone, despondent soul sits slouched upon a bar stool, sipping away the worries of a world sunk deep in economic depression and tense with precarious political balances. Stepping into the bathroom to answer a call from the body's nether-regions, this lone soul assumes a gender and is whisked into a racy lampoon of the Flash Gordon era sci-fi.

1950. Atom City, Nevada. Twenty years, a world war and the nefarious acquisition and dismantling of a Massachusetts based computer game company have passed since the evil plans for world domination by the *Leather Goddesses of Phobos* were thwarted through the invisible efforts of a now dead Ohian. Now, in a bizarre twist of fate that could only be the set up to a sequel, the son of that unsung Earthling must now finish the job that his parent somehow left unfinished. Yes. Miraculously resurrected from their Ultimate Defeat, those leather girded dominatrixes are once again out to capture the hard disk space of adventure gamers in, *Leather Goddesses of Phobos 2.*

Steve Meretzky's *Leather Goddesses of Phobos* (*LGOP*) was a classic among the many text-adventure titles produced by Infocom during its glory days in the mid 1980's. *LGOP* was unique in that it was one of the first 'adult' computer games widely distributed and was the first to give the option of choosing between a male and a female protagonist in a genre that had, until then, completely ignored the female gamer. In addition, *LGOP* was composed of some of Meretzky's best humor, a challenging set of puzzles, and a funny, bawdy, though "mature" treatment of sex.

Since then, the original owners and designers of Infocom, as well as the days of text adventures, have been cast to winds. Meanwhile, Steve Meretzky has been keeping himself busy authoring Legend Entertainment's{*Spellcasting 101 & 201*} series of graphic adventures. *LGOP2* finds Meretzky rejoining the Infocom label to revive his old title with a new era to parody and a new era of adventure game technology to exploit. Unfortunately, to the disappointment of this Infocom and Meretzky fan, the combination of author, production group, and new technology seems to lose the entire spirit of the original text game in the 'translation' to graphic adventure.

TITLE:	Leather Goddesses of Phobos 2: Gas Pump Girls Meet The Pulsating Inconvenience From Planet X
SYSTEM:	IBM
PRICE:	$69.95
PROTECTION:	Document Look-Up
DESIGNER:	Steve Meretzky
PUBLISHER:	Infocom (label of Activision)

Similar to the original *LGOP*, *LGOP2* can be played from different character perspectives. In *LGOP2* these include: Brad, the son of the hero of the original game, Lydia, the daughter of the town astronomer, or Barthgub, a pulsating inconvenience from Planet X. With each character under their command, players see a somewhat different side of the story in pursuing different tasks and overcoming different obstacles. All are out to stop the evil devices of the Leather Goddesses, and all must romp through a rather good parody of 50's era sci-fi, which takes its shots at *The Blob* and *War of the Worlds*, among other xenophobic creations born on the eve of the "Space Age".

After the title, the author and the plot, all parallels between *LGOP2* and its predecessor come to an abrupt halt. Any resemblance between the game interface for this game and the interface of the original, living or dead (and which can be succinctly described in one character, ""), is purely coincidental. Instead, the interface has been replaced by that of a typical graphic adventure. In the original, all the aural stimulation one could expect was the rapping of keys set to the beat of a computer fan, whereas *LGOP2* boasts a complete soundtrack and digitized speech — lots of digitized speech. In fact, of the ten 5.25 inch disks the game came on, I would venture at least three-quarters are filled with speech. All of this is not necessarily an improvement.

The *LGOP2* game environment is, like all graphic adventures, divided into discreet locations given full graphic descriptions. The graphics themselves are spotty - with the occasional well done piece (some very nice stuff in the introduction), but for the most part quite mediocre. They generally lack cohesiveness - a quality indicative of a group effort without an overall artistic vision. Still, as the original *LGOP* proved, a game is not necessarily a beauty contest and, even if it were, there is always the talent show. We move to the interface...

Following the trend in the genre, *LGOP2* has honed down its interface to the bare essentials. All possible interactions with the game





are mediated by a happy little cursor that provides players with all the information they need. As the player moves the cursor about the screen, the cursor icon changes to reflect the 'interactive potential' of that object. If the icon is a hand or tentacle, depending on the character one is currently playing, then that item can be looked at or taken. If an arrow, one can go "thataway." If a mouth, dialogue is possible. Simply put, we have 'go', 'take', 'look', 'talk' and a combination of clicks that amount to 'use.' An interface can't get much tighter than that.

Now, many people like the direction adventure game interfaces are taking. The simpler they are, the more friendly and accessible the game becomes and the easier the game is to design and program. While an interface like *LGOP2*'s is intuitive and unambiguous, it can often seem to err a bit on the side of simplicity. With the decrease in the range of player interactions (reduced, basically, to 'take' and 'use' in this case), it seems the range of possibilities for interesting puzzles decreases as well. More and more, graphic adventures are becoming Easter egg hunts where the player's job is to run around gathering goodies and putting them in their proper baskets. Admittedly, the balance between clarity and the expressiveness of player interaction has always been a difficult design decision, but it seems we may be taking the simplicity thing a bit to far. Then again, this is the opinion of an

atavist who still thinks text parsers are a good idea.

If the heart of an adventure game is its story and puzzles then, frankly, *LGOP2* could use a defibrilator - stat. The storyline is rather cliche, though I suppose it would have to be as a spoof of the 50's era 'B' sci-fi movies. Certainly, the plot elements and the characterizations are all drawn from those 'classic' films. It certainly does a better job with the spoof than **Cinemaware** did with *It Came From The Desert,* though it seems to run dry in spots and it certainly runs short. The Leather Goddesses, for whom the game is named, have an all-too-brief role in the game, and the Gas Pump Girls, who were given second billing, have little to do with the plot. I was hoping they might have been possessed pawns of an alien mind or secret conspirators with the CIA or, at least, the Leather Goddesses incognito, but alas, all they turn out to be is an excuse for more bit-mapped bimbos and a catchy subtitle.

As for puzzles, they are pretty rare creatures in *LGOP2.* Playing the game as one of the humans involves a small handful of them, most of them of the "use-the-right-thing-on-the-right-thing variety," while the number of puzzles in the Barthgub (the alien) game can be counted on one tentacle. Playing as Lydia the first time through, with the digitized speech turned on and playing at a leisurely pace, I finished that game in about 6-7 hours and thereby, challenged the records established by *Loom* and *Space Quest IV.* As the alien, it was more like one hour. A member of the *LGOP2* design team addressed this issue by stating that the game was targeted toward a beginner level gamer. I thought this odd considering that, one, this is a Meretzky game (who is described in the documentation, in reference to the puzzles, as having a "truly devious mind"); two, is a sequel to a game with interesting and challenging puzzles; and three, that nowhere on the game packaging is this fact pointed out.

Sp..p..peach Immmmm...pediments

As mentioned earlier, *LGOP2* supports a huge amount of digitized speech in its character interactions. In fact, I would say that *LGOP2* includes the most ambitious speech support effort ever packed into an entertainment product. The pleasantly surprising part of it is that one need not even own a sound board to hear this dialogue, for the game package includes an adapter, called the *LifeSize Sound Enhancer,* that will pipe quality speech through a printer port and out to amplified speakers. The sound quality from this adapter is very nice; it's loud and clear. Unfortunately, the actual readings of the dialogue shoot well below par.

One would think that if a design group were going to invest so much time and disk space (both = money) to speech, they would invest a little more to get decent speech talent to do the readings. In a penny-wise pound-



foolish production decision, it appears as if the 'front-office' people at **Activision** were rounded up and given a shot at their 15-minutes of stardom. Unnatural pacing, wooden emotion and unconvincing caricature take part in a production strongly suggestive of mediocre amateur theatre. At its best, the speech does not add a thing and, if I hadn't been playing for the purpose of a review, I would have opted to play without it after the first few wincing minutes. I sure wish they would have traded a couple megabytes of this stuff for a few more hours of game play.

Es Ee Eks

I approach the issue of sex with fear and trepidation. It's a can of worms, and no matter how I handle it, there will, without fail, be ordnance heading my way from all camps. Nonetheless, I think a few words here are appropriate, so I'll hunker down in my bunker and listen for incoming.

First off, anyone who could get much titillation from a cartoonish computer game like LGOP2 is pretty hard pressed or a very frustrated young teen (usually it's both). If one were seeking pornography one would be well advised to seek out another medium. Sex (as well as vulgar language and 'adult themes') in computer games, then, should be used to achieve other aims. For example, one might use these "tools" to add *realism* to a dramatic storyline or as a comedic tool in a humorous game like *LGOP* or Sierra's *Leisure Suit Larry.* Indeed, it seems the cartoonishness of the graphics and the silliness of character caricatures in games like these create a fertile playground upon which to dance upon taboos and lampoon the sillier aspects of human behavior. As Steve Meretzky says in his disclaimers on his adult games, "Sex is fun" and, I might add, is funny as well, in appropriate contexts. I believe it was precisely this adult, 'sex is fun' treatment of the 'nasty' content in Meretzky's earlier racy works (and in Sierra's Larry series) that protects these game's from most accusations of being pornographic.

The approach to sex in the original *LGOP* was silly and irreverent, and yet at the same time, through Meretzky's particular humorous slant, lent a 'mature attitude' to the treatment. However, the sex in *LGOP2* seems to take on a much different color. One probable cause is the fact that Meretzky's humor does not shine as brightly as in his others games. In previous games, his humor is at its best in descriptions and in witty come-backs to player actions, whereas in LGOP2, the game's structure eliminates much of the need for description and, for obvious reasons, places emphasis on character dialogue. Whether for lack of inspiration or lack of opportunity, good chuckles are sparse in *LGOP2.*

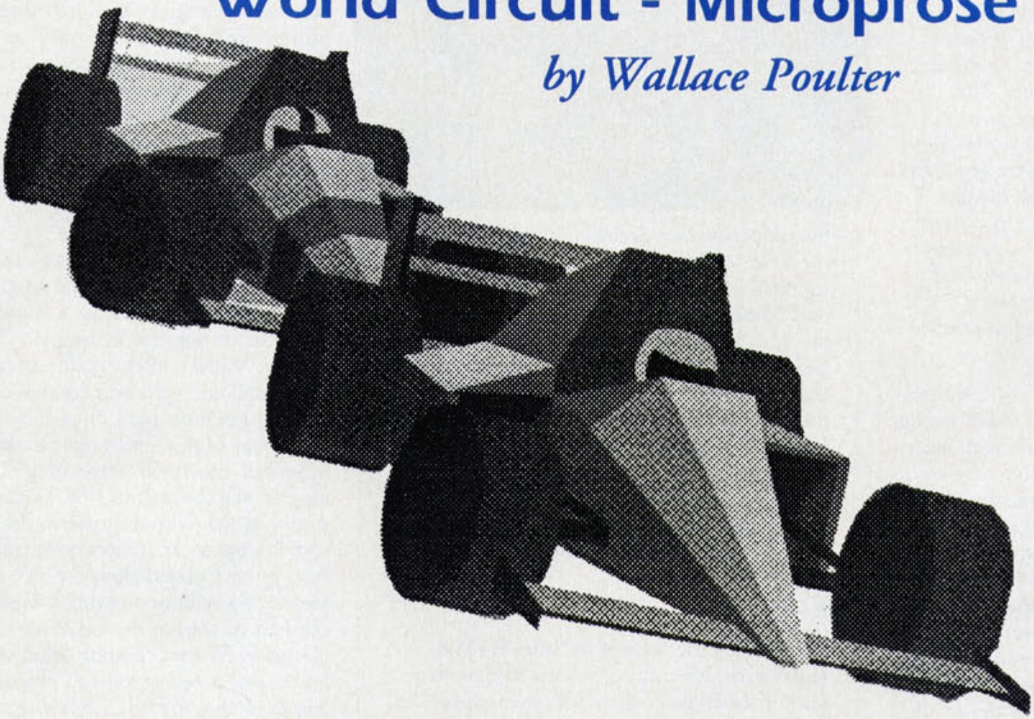
Perhaps this is one reason why the treatment of sex in LGOP2 seems so gratuitous, and adolescent, and (to use a friend's favorite adjective for pop music) insipid. The game's 'explicit' visual content is all very tame (no more explicit than a beer commercial, really) and, for the most part, involves rather mediocre images of women in tight shirts, garters, or leather, most with impossibly protruding nipples. It's the stuff of a Wally Cleaver daydream, which is appropriate to the game context, I suppose. It appears quite innocuous at first, yet as I played along I began to sense an underlying attitude running though it all that can best be seen in the use of a whorehouse in the game. When one approaches this whorehouse, one is served a menu of a dozen or so names to choose from. Choosing a name takes players to a harlot's room and affords them a "look at the goods". Though loosely integrated into the storyline, it is all too apparent that it is merely an excuse for a slide show of more rather average drawings of women. You have to wonder what Activision was thinking. Do they imagine adults are turned on or, at minimum, entertained by this stuff? If they do, then I think they've misunderstood their market. And that must be the case, for the only other possibility is to suggest that their real target market is actually, and more insidiously, a younger, larger slice of the computer game demographics pie.

If there is anything that can save *LGOP2* it's Meretzky's occasional gem of a barb or wise crack, and his goofy spoof of old sci-fi movies. The yucks, however, are few and far between; the story is too short and the puzzles are too weak for most gamer's blood. If you want Meretzkian prose, take **Activision** up on its $9.95 offer for the original *LGOP* and bide your time with that classic, while waiting for someone to produce an interesting 'adult' adventure. CGW

True to Formula (One, That Is!)

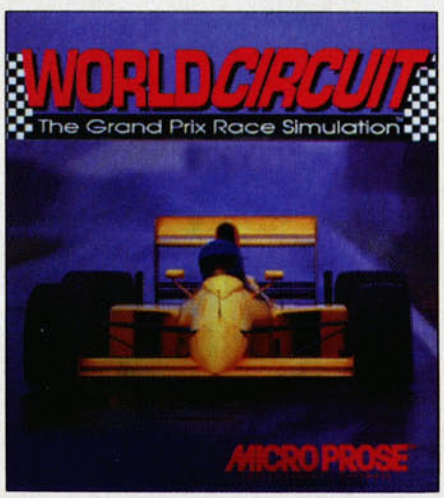
World Circuit - Microprose

by Wallace Poulter



Title:	World Circuit
System:	Amiga
Protection:	Look Up
Price:	$59.95

Sanchez crosses the start/finish line in 6th gear at 174 mph and begins his circuit of Silverstone. The pit lane flashes by on the right, grandstand to the left as Sanchez downshifts to 4th for the right hander, Copse. Then, accelerating briskly away, Sanchez darts through Maggots in 5th, breaking for the 2nd gear jink of Becketts and sweeping right into Chapel. Then, through the gears, 3rd, 4th, 5th up to 6th and 180 mph down the Hanger Straight and under the bridge, again breaking sharply down to 100 mph for another right hander, Stowe. He accelerates through The Vale, pulls back briefly into 4th before taking the Club in 3rd and moving onto the fastest part of the course, The Abbey Straight, at 185 mph. 6th gear is maintained through the Farm Straight,



under a second bridge and into the slowest part of the course, the left handers, Priority and Brooklands. Sanchez exits Brooklands in 2nd and climbs back up through the gears, 3rd, 4th, 5th through Woodlands at 146 mph and finally up to 6th as he once again crosses the start/finish line.

Qualifying

Formula One is the ultimate in race driving. It is home to the greats of Racing: Fangio, Hill, Moss, Lauda, Stewart, Brabham, Prost, McLaren, Surtees, Senna, Piquet, Andretti, and the greatest of them all, Jimmy Clark. There's something special about Formula One, the stories and history of men and

machine: of Giles Villeneuve, the great Canadian, who was blindingly quick and was either going to be Champion or die trying (and tragically accomplished the latter); the heroism of James Hunt, pulling Ronnie Peterson from a starting grid pileup; or the fighting spirit of Nigel Mansell, pushing his fuel-less car down the final straightaway in Dallas. The vehi-

cle names conjure up instant magic: Ferrari, Lotus, McLaren, and a host of others who have passed through Formula One history. The circuits themselves provide a multitude of memories: Monte Carlo, Silverstone, Monza and Imola. That's a lot to live up to and *World Circuit*, from **Microprose**, is the latest in the field and has grabbed the pole position in qualifying.

Warm Up Lap

The quality and content that we have come to expect in **Microprose** products is self-evident. A fact-filled 168 page manual is the basis of a detailed product. Clear, concise instructions are provided, along with full details concerning the 16 circuits featured in the game, last years teams and driving hints. A non-Championship Race is recommended before throwing yourself into the fray of a 16 circuit season.

This is a product that exudes quality. The polygon graphics and sound are excellent. For those users using floppy disks, disk swapping is kept to a minimum and none are needed during the race, even in Camera mode. *World Circuit* provides five levels of play from rookie to ace. Driver aids such as Indestructibility, Best Line, Self Righting Spins and Auto Brakes are available. This reviewer recommends switching off indestructibility as soon as possible, as this only encourages "Destruction Derby" type tactics.

The Circuits

As noted earlier, 16 circuits are provided with World Circuit. The contrasts are enormous. Spa-Francorchamps is in the heart of a Belgium forest, while Phoenix provides an urban jungle. Each circuit drives very differently and one's situation within a race will also determine the "feel" of a course. Naturally, concentrating on the exhaust pipe of a driver in front will cause one to be oblivious as the surrounding course flies by.

Phoenix is the first course encountered in the Championship Season. Passing opportunities are limited and speeds remain reasonably low. It is a good course on which to learn patience and it is hard to make mistakes. The Interlagos Circuit in Brazil is second. The long start/finish straight allows cars at the back of the grid to charge forward. It is an excellent course to practice on, as qualifying mistakes can be recovered. Two words of caution, the first corner, Curva 1, is quite easy to spin in, and not just the player. More than once, this reviewer was leading a race only to come upon an accident without warning. As a result, a hearty cry



of 'Ramming Speed' was the only resort remaining. Imola comes up third, and is just waiting for the over confident player (and reviewer!). The most difficult section of track in the entire game resides at Imola. The Acque Minerale chicane has a tendency to spin out an aggressive driver as the back end clips the curb. This corner should be taken from wide on the left.

Each of the other 13 circuits provides variety and spice. Monaco, demands a good qualifying time as passing is next to impossible (try the tunnel); the Giles Villeneuve Circuit in Montreal provides long fast straights and sweeping corners; Mexico City is the easiest course in the game and allows players to race from the back of the grid and still allow the player should be able to win comfortably; and Adelaide has significant hills and valleys that add to the visual delight.

Handling Problems

The options presented in the game are too numerous to mention. Car Set-Up, Tire Choice, Wet Weather and more are available. Yet, they also presented the only negative with this product. The user does not need them. *World Circuit* is just a little too easy, even at Ace level. The Nigel Mansell school of driving, foot to the floor until the car breaks or wins, is well rewarded. While this may be appropriate, considering Mansell's dominance this year in Formula One this year, a more challenging Ace level would have significantly enhanced this product.

Yet, readers are urged not to believe that this diminishes the level of competition provided within the program. My most enjoyable race was starting at the back of the grid at Monaco and making it into the points. With two laps to go, the 6th placed car was in sight and it took the two fastest laps of the day, and some outrageous breaking, to catch that car on the final corner.

Checkered Flag

The statistical portion of *World Circuit* is also impressive. At the end of a Championship Race, a complete statistical overview of the race and the season is available. Race finishing times, fastest lap times, driver race points, constructor race points, driver's championship table, constructors championship and season results are all options. No real-life drivers or teams are named, but editing is possible.

Conclusion

Even after a number of years, **Electronic Arts'** *Indianapolis 500: The Simulation* remains the standard by which all Auto Racing games must be judged. Certain items such as the Camera function remain the domain of Indy 500. However, the game play of *World Circuit* is without comparison. *World Circuit* is a winner, going away at the finish. CGW

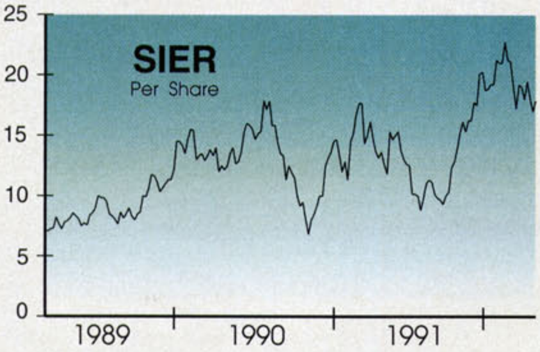


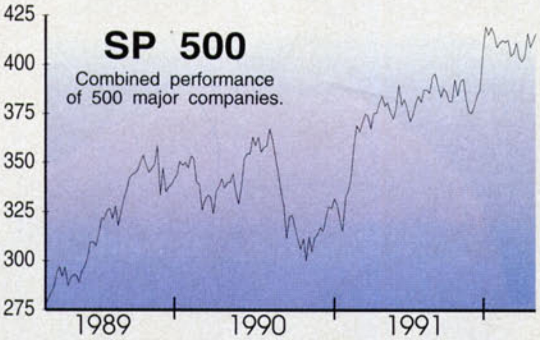

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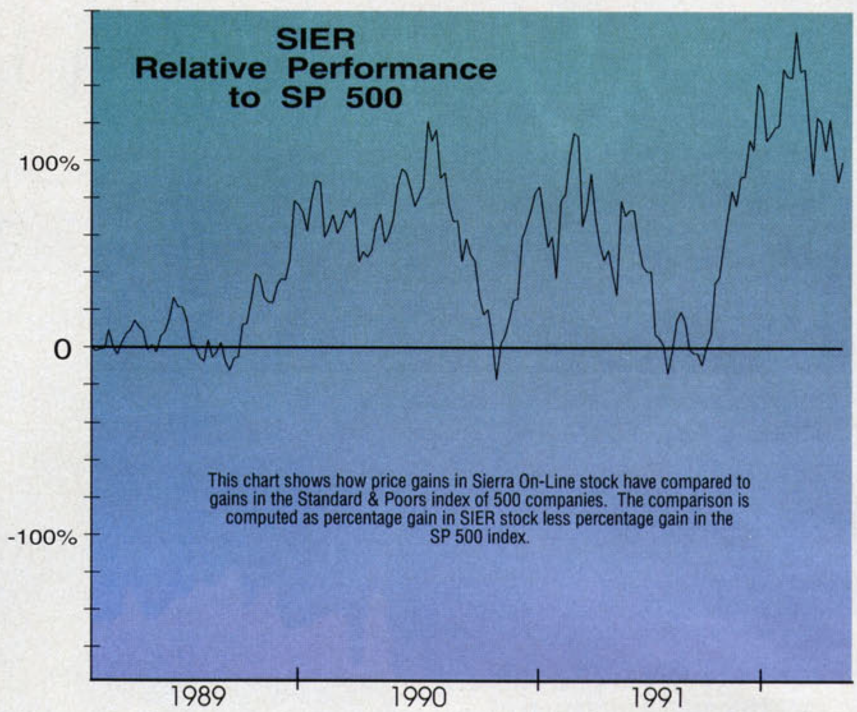
CGW STOCK WATCH

A monthly look at the Computer Entertainment Stock Market

Sierra On-Line Stock Outperforms the Broader Market







The *CGW Stock Watch* is a graphic look at the relative health of the computer entertainment software industry by observing the performance of the publicly traded players. The charts and commentary presented on this page are a reference point for hobbyists who might be interested in investing in these companies, but should not be used as a primary tool for investment because of the lagging nature of the data (because of the lead times inherent in publishing a monthly magazine). As always, investors are advised to perform their own diligent research prior to investing.

Sierra On-Line (NASDAQ: **SIER**) was the first major computer game company to "go public." At first observation, the Sierra chart presented in the upper left-hand corner simply looked incredibly volatile. Upon comparing the chart with the overall market (using the Standard & Poor's 500 as our benchmark), however, we observed that the largest decline in the years tracked was concurrent with the steep decline in both the SP 500 and the more familiar Dow Jones Industrial Average (representing only 30 "blue chip" companies). We also recognized that the steep descent in mid-1991 was based on disappointing earnings news. After reporting a 94% plunge in second quarter profits from those of the year before, the stock price dropped to the $13.00 per share range. As a corporation, **Sierra On-Line** proceeded to start a "buy-back" program during the late summer 1991 decline. Except for those drops, however, SIER stock significantly outperformed the overall market. The large chart was developed by comparing the percentage gains to be earned if an investor had placed an equal amount of money in Sierra as opposed to spreading the investment over the broad market represented by the 500 companies in the SP 500. So, on those points where the large chart tops the 100% mark, our hypothetical investor would have made twice as much profit on SIER stock as he/she would have made with the 500 S&P companies. When the line dips below 0, the investor would have been better off with the SP 500 "investment." Note that the strong performance depicted on the large graph depends on buying Sierra on or near its lows. Purchases at higher prices would reflect less impressive gains. Also, because of the solid performance of secondary issues (NASDAQ stocks, in particular) during the latter part of 1991, the performance might not be as impressive against those companies as opposed to the comparison with the SP 500 companies.

The axiom of investment, however, is that "Past performance is no guarantee of future results." Potential investors will want to consider the impact of Sierra's recent (Spring 1992) secondary offering and lower second quarter earnings ($.05 per share, as opposed to $.20 in 1991). Much will depend on investor's feelings about how well **The Sierra Network** will do and the prospects for sales in the final two quarters.


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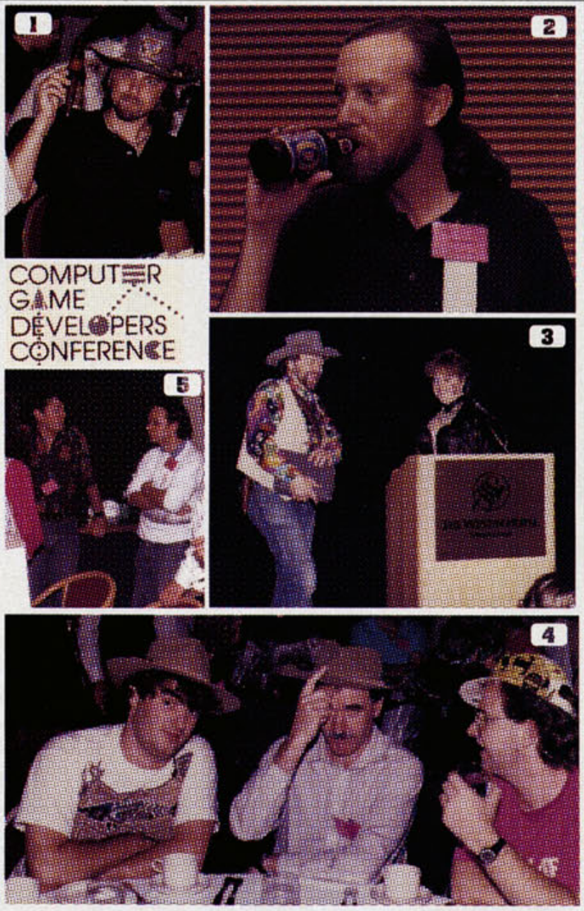
Consensual Hallucinations and Good Vibrations

CGW's Report on the Sixth Annual Computer Game Developers Conference

John Perry Barlow of the **Electronic Freedom Foundation** is something of a folk hero. He disarms observers and listeners from the raw distaste one almost innately feels for one of his profession (an attorney) with the rugged individualist facade of his folksy frontier image (a Colorado cattle rancher, complete with holstered handgun at his side) and his reputation as a rock lyricist (for the Grateful Dead). Indeed, as the featured speaker at the annual banquet, he claimed to be the second in Brenda Laurel's Annual Lecture Series (science fiction author Bruce Sterling spoke last year), but he may have functioned more as the cerebral catalyst that challenged the brain trust of the computer game industry to think through the implications of their work. Barlow, who has been instrumental in efforts to apply constitutional rights to the world of networks, databases and, eventually virtual reality, has the right to ask designers and programmers to consider the impact of their work on reality. He has fought to keep the government from usurping the information frontier and corraling both creators and consumers into cultural reservations of legislation and law enforcement.

Barlow began by citing an oft-quoted tenet of Jean Baudrillard (from a 1983 book entitled *Simulation*), to wit that "The territory no longer precedes the map, nor survives it." Resonating with the sentiment, Barlow suggested that many people in present society are leaving the landscape to *live* on the map. He contended that information as "alienated experience" has become a substitute for experience. The implication being, of course, that people would rather watch travelogues than travel, observe sports than participate or play computer games/videogames rather than take authentic risks.

The problem is likely to arise, however, when the alienated experience of vicarious satisfaction subconsciously melds itself to one's perception of the real. "Simulation," he observed, "leaks out from behind the screens and invades the landscape, attaching itself to the real." Since information has no mass, he argued, this "alienated experience" has no moral mass. Then, once things are extracted from the real world and placed in the vicarious environment where one can do "virtually" anything without repercussion, Barlow suggests that the disaffected citizens who have settled for information rather than reality could have the capacity to do *anything* to other human beings. "Simulations that edit out people can make you crazy!" he asserted. Barlow followed this line of argument with a plea for developers to design multi-player games so that "wasting" an opponent would mean something, as opposed to the abstractions which gamers "blow away" with impunity in many of today's games. One wonders if Barlow has ever played the board games: *Diplomacy, Machiavelli,* or *Empires at Arms* (or even a play-by-mail game which features diplomacy like *Cosa Nostra, Starweb* or *Feudal Lords*) where the dynamic is to conquer one's opponents even though they happen to be real human players rather than an artificial intelligence. *CGW's* editor suggested to listeners after the banquet that moral mass was best injected by having the player face simulated *consequences* of his or her actions, as opposed to simple victory conditions (Remember Chris Crawford's refusal to put a neat



1. Richard Gariott, aka Lord British, salutes CGW readers during the costume banquet. 2. "Iron Man" Dan Bunten enjoys a Foster's, mate. 3. John Perry Barlow has just been introduced by our own Sara Reeder. Sara does children's games for CGW. Hmmm... perhaps Sara would feel more comfortable reviewing Leisure Suit Larry? 4. Roger Keating of SSG, flanked by fellow Aussies Steve Fawkner and Gary Makin, says 'gday. 5. Sid Meier (r) and Mark Baldwin discuss royalty rates.

The Book Store

CGW Presents . . .



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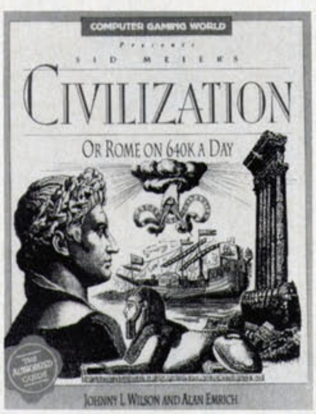
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The Official Guide To Sid Meier's Railroad Tycoon

by Russell Sipe COMPUTE Books $12.95 U.S. $16.50

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Sipe's book will add immeasurably to your enjoyment of Railroad Tycoon. - Neil Shapiro, PC Games Magazine

Here are just a few of the things you'll learn: get the answers to puzzling economic forces in the game; learn to defeat each of the tycoons; manupulate the stock market to your advantage; and learn optimal building and survey techniques.

The SimCity PLANNING COMMISSION HANDBOOK

by Johnny L. Wilson Osborne McGraw-Hill $14.95

Each time we read this book we learned something, because it explains the theory behind the game and doesn't just list one-two-three hints. - START Magazine

Reading the draft for The Sim City Planning Commission Handbook has been quite educational and entertaining for me, but also strangely familiar, as I go through the discovery process once again. - Will Wright, designer of SimCity

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looking mushroom cloud in *Balance of Power?).*

The conclusion of the speech was stirring, however. Barlow insisted that the creations of the people assembled within the banquet room were going to affect, not only the perceptions of the next generation, but also the attitudes of future citizens within the global village. "A lot of the work of world design is going to be done by the people in this room. I know that neither you nor many other people take you seriously. But that makes you dangerous. You can do it [create a positive global attitude] before the powers that be know what you're doing."

@Subhead = More Movie Metaphors (Brian Moriarty, *Trinity* and *Loom*)

Like the motion picture industry, the computer game industry affects attitudes and perceptions through *entertainment.* Also similar to the film industry, the entertainment industry builds expensive product, at high risk, based on intellectual properties. So, it was only natural that the term, "New Hollywood," would be coined to reflect the similarities. Moriarty had given a lecture during last year's conference in which he allowed computer game developers to draw their own caveats from the history of silent film. He began by observing that there was a great deal of difference between the industries, simply because the film makers had been equipped with a relatively stable platform (the film projector) from early on. At this year's conference, Moriarty continued his film history tour de force with a consideration of film since the inception of sound.

When soundtracks were first provided for films, Warner Brothers' *Vitaphone* process was the initial medium. *Vitaphone* was a sound system which used metal disks and required seven pounds of pressure on the turntable (as opposed to the 1.5 or 2 grams used on most turntables, today). The start-up cost in the mid-1920s was $25,000 and the disks had to be replaced every week. The earliest hit on Vitaphone was *Don Juan*, directed by Alan Crosland. It ran for eight weeks in the Warner Refrigerated Theater in 1926 and was basically a score with sound effects. The sound effects included door knocks and a sword fight that sounded more like sticks clunking together rather than swords clashing. Nevertheless, critics called Vitaphone "uncanny in its excellence." It was immediately popular enough that there were 125 Vitaphone theaters by 1927.

Crosland followed up his success in *Don Juan* with *The Jazz Singer.* The big improvement in the latter film was the use of real synchronized sound, including the undeliberate use of sound. As one critic noted, it was the "first movie where sound was not heard, but *overheard.*" It featured the first use of sound cutaways and allowed Jolson to play to the audience within the movie. Microphone mixing was unheard of at the time, so the sound quality was uneven, at times.

The result of successful films with sound was that the economy of the entire film industry was threatened. The origi-



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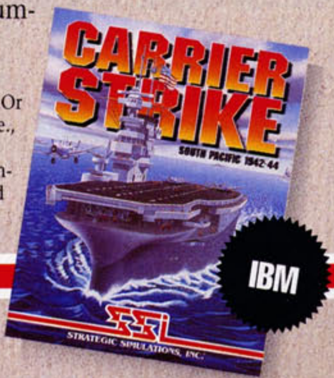
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nal playwood studios had to be rebuilt (to screen out ambient noise), theaters had to be rewired (both for Warner's *Vitaphone* and 20th Century Fox' *Movietone*, a process where sound was captured on film), film libraries became totally obsolescent, foreign translations became more expensive and many stars became expendable because of their poor vocal quality. Within 18 months after *The Jazz Singer*, the studios decided not to license *Vitaphone* technology, but agreed to use *Movietone* (largely because of the success of the famous Movietone News Reels shown before most features in the Movietone theaters). The result was a standardized technology that stopped Hollywood's decline and allowed the film industry to flourish during the upcoming depression. If, however, Warner had not introduced the technology when it did, the chances are that the technology would not have been brought to the public until *after* the depression.

Although Moriarty did not see any necessity to moralize upon his presentation, we will not hesitate to draw the implied lessons somewhat larger. First, while new technologies enhance the product and may revitalize an industry, they do not accomplish this without relearning and rebuilding. Directors had to learn to use the sound possibilities and this meant, of necessity, that there would be weaknesses in some products. Studios and exhibitors discovered that there were hidden costs in providing state-of-the-art entertainment. In the computer game world, sound is not always used to its most effective ends. Higher costs in terms of composition, data storage, equipment, enclosed office space (a luxury at many computer game publishers) and the like are not immediately recouped in software sales. Further, these problems are exacerbated by the fact that there is no sound standard in the computer game world, even though the film industry had a sound standard before the Great Depression. Though great efforts have been made in sound during the last three years, we will not see the fruition of these efforts until there is an actual standard.

Second, we found it curious that the adoption of a sound standard in the film industry brought about a crisis in terms of snob appeal. Many were asking what would happen to the class theaters with orchestras and fabulous organs if any "jerkwater" movie house could have quality music and sound on film. One wonders if there are not owners of high-tech systems who are asking, "What will become of the computer if the CD-ROM drives for the 16-bit game systems provide enough storage so that gamers on those systems can have roughly equivalent experiences to what we experience?"

Moriarty continued his presentation with a brief history of color technology. He observed that hand tinting had been in use for years by the time **Technicolor** was founded in 1918. In 1922, the company introduced "two-strip technicolor." Their first three-strip technicolor was a **Walt Disney** picture. **Technicolor** held a patent until the 1940s when anti-trust legislation forced the company to release the patent information to the studios. This action eventually allowed **Eastman**

Conversions Received

Battle Isle (Ubi Soft) IBM

Eye of the Beholder II: The Legend of Darkmoon (SSI) Amiga

Heart of China (Dynamix) Macintosh

Hoyle Official Book of Games Volume 3: Great Board Games (Sierra) Amiga

John Madden Football (Electronic Arts) Amiga

Police Quest 3: The Kindred (Sierra) Amiga

Space Quest I: Roger Wilco in the Sarien Encounter (Sierra) Amiga

The Adventures of Willy Beamish (Dynamix) Macintosh

The Seceret of Monkey Island (Lucasfilm) Macintosh

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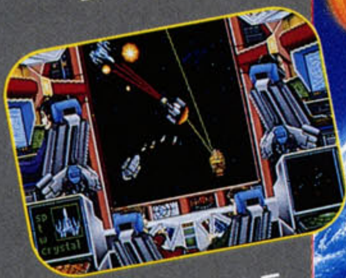
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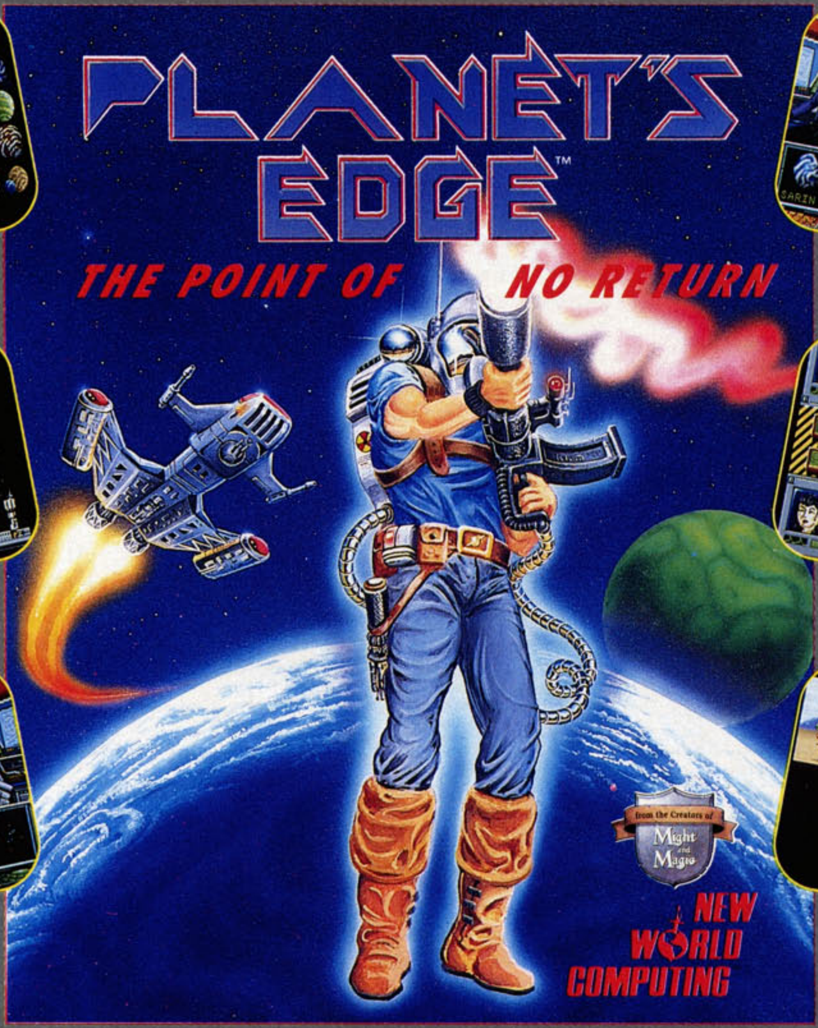
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Kodak's *Eastman Color* to supersede *Technicolor* as a process.

Although there are always parallels between the two industries whenever litigation is discussed, we thought it was interesting that anti-trust legislation against **Technicolor** cost that company its monopoly whereas videogame manufacturers are allowed to keep their exclusive patents during the present era. Nevertheless, the studio's liberation from **Technicolor**'s monopoly set them free to reach the all-time pinnacle of Hollywood ticket sales. In 1946, the film industry was collecting on 100 billion tickets per week. By 1950, the film industry was almost dead.

Moriarty cited three major factors in the near-demise of the film industry: anti-trust suits (studios were no longer allowed to own both distributors and theaters) which forced studios to divest themselves of many of their holdings; investigations by the House Committee on Un-American Activities (HUAC) which brought about a plethora of both bad publicity and creative paranoia; and the rise of television from one million sets prior to 1949 through ten million sets in 1951 and up to 100 million sets in 1959. At this point, Moriarty moralized for the only time during the lecture. His thesis was that Hollywood's basic characteristic was its adaptiveness. They tried to get people back in the theaters by offering experiences which the customers couldn't get at home. Obviously, the adaptive strategy is something that the computer game design community will need to emulate in order to survive during the transitions of the future. Though the final section of his lecture dealt with the success of Cinerama, the most sobering part of the presentation dealt with 3-D films. Moriarty cited two factors which killed 3-D films: garbage (the genre started with *Lights Out* impressario Arch Obler's *B'wana Devil* and didn't get any better) and exhibitors (it cost $12,000-14,000 to convert and synchronous the two projectors required, while customers were unwilling to pay extra for the experience). Moriarty did not draw conclusions about the nature of "garbage" in the computer game industry and declined to speculate on the price of adding certain features to computer games versus sales resistance at higher prices. He did comment, however, that designers should not go "feature crazy" or become such technophiles that they incorporate technologies into a game whether it needs it or not. He observed that Alfred Hitchcock was forced by the studios to film *Dial M for Murder* in 3-D. Hitchcock used it, primarily, for one memorable scene (the hand grasping out toward the viewer in desperation). The message was clear!

Making It Real: Story & Character (Ellen Guon, *Wing Commander II*, and Katherine Lawrence, *Dungeons & Dragons* television series)

Another session which featured an emphasis on story over technology was that presented by two experienced television script writers. Guon and Lawrence lectured that writing is not magic or art. Instead, they posited the thesis that writing

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VIKING RATINGS

Ultima Underworld	A+
Ultima VII	A+
Global Quest	A
Planets Edge	B+
Jack Nick. Golf	A
Free D.C.	C-
Carrier Strike	A
Pacific Storm (MIDWAY)	C
Black Crypt	A
Merchant Colony	B-
Dreadnaughts	D+
Conflict Korea	B+

ADVENTURE / ROLE PLAY

PAST

	IBM	AMI
Bard's Tale (Const)	35	-
Black Crypt	-	34
Castles	36	36
Castles N. Camp.	19	-
Celtic Legends	-	May
Champions Krynn	34	34
Conquest of the Longbow	42	-
Curse Azure Bonds	34	34
Dark Lands	39	-
Death Knights Krynn	34	-
Dark Queen of Krynn	34	July
Dusk of the Gods	38	-
Eye of Beholder	34	34
Eye of Beholder 2	38	38
Flag	June	June
Four Crystals of Trazere	-	34
Gatewy Savage Frontier	34	34
Heimdall	June	42
Kings Quest 5 VGA	42	39
Kyrandia	June	June
Legacy of Necromancer	June	June
Lord of the Rings	36	36
Lord of the Rings 2	36	36
M&M CLouds of Xeen	39	July
Magic Candle 2	39	-
Martian Dreams	39	-
Might & Magic 3	39	39
Merchant Colony	32	-
Orbitus	32	38
Pirates	15	15
Pool of Radiance	34	34
Pool of Darkness	39	39
Prophecy of the Shadow	39	-
Rampart	28	28
Realms	Summer	Summer
Secret of Monkey Island	37	37
Secret of Monkey Island 2	39	39
Secret Silver Blades	34	34
Siege	38	-
Spellbound	Summer	-
Tales of Magic	39	-
Treasures Savage Frontier	34	-
Ultima 6	42	42
Ultima 7	47	-
Ultima Trilogy 2	47	-
Ultima Underworld	47	-
Uncharted Waters	43	-
Wizardry 6	39	39
Wizardry 7	June	June

PRESENT

	IBM	AMI
Buzz Aldrin Space	June	-
D/generation	34	-
Elvira 1	43	43
Elvira 2	43	43
Heart of China	37	37
Indy Jones Atlantis	39	July
K.G.B.	Sep.	Sep.
Leisure Suit Larry 5	42	38
Lost Treas. Infocom	46	46
Oh No! More Lemmings!	22	22
Jaws of Cerberus	43	43
Lost in L.A.	38	-
Out of this World	37	37
Police Quest 3	42	37
Rocketeer w/Sound	42	-
Savage Empire	39	-
Sea Rogue	-	-
Spell Casting 201	39	-
Strike Commander	Sept	-
Willy Beamish	42	-

FUTURE

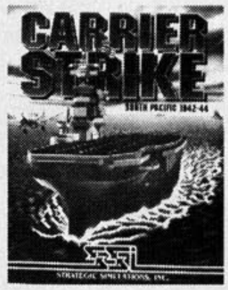
	IBM	AMI
A.G.E.	June	June
B.A.T. 2	-	May
Battletech 2	33	-
Buck Rogers	15	33
Buck Rogers 2	34	34
Breach 2	21	34
Dune	Spring	-
Epic	-	Spring
Elite Plus	19	-
Free D.C.	40	-
Hard Nova	34	34
Jonny Crash	Fall	-
Leather Godesses of Phobos 2	46	-
Mantis Fighter	June	-
Martian Memorandum	38	-
MechWarrior	24	-
Megatraveller 1	15	-
Megatraveller 2	39	Spring
Megatraveller 3	Fall	-
Nova 9	25	-
Planets Edge	38	-
Rise of Dragon VGA	39	39
Rules of Engagement	39	39
Space Quest 4	42	37
Spec. Ops 2 (Wing. Lo 2)	27	-
StarFlight 1	19	34
StarFlight 2	19	34
Star Trek 25th Anniversary	36	-
Twilight 2000	32	Summer
Twilight 2001	Jan 93	-
Ultrabots	June	-
Wing Commander	45	-
Wing Co. Secr. Miss. 1	21	-
Wing Co. Miss. 2	21	-
Wing Commander 2	47	-
W/C Spec Ops 1	27	-
Speechpak	15	-

HINT BOOKS

AD & D Clue Books	10	-
Chuck Yeager Handbook	15	-
Civilization	17	-
Eye of Beholder 2	12	-
Gosselin Hint Sheets	8	-
Gosselin Char. Edit	15	-
Falcon Air Combat	12	-
Lord of Rings	10	-
Lucasfilm Air Combat	16	-
Harpoon Battle Book	19	-
Might & Magic III Hint	15	-
Railroad Tycoon	12	-
Run 5 Magazine 1-17	5	-
Seria Hint Books	8	-
SIM Earth	19	-
Wing Commander Hintbook	15	-
Wizardry 6 Hint Book	12	-

HARDWARE

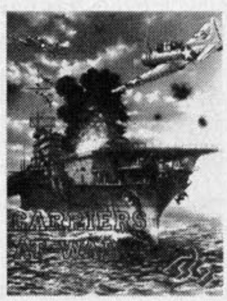
Ad Lib Gold		
1) PC 1000	Spring	-
2) T2000	Spring	-
Ad Lib (Micro Ch)	145	-
Soundblaster (Pro)	190	-
Soundblaster (Micro Ch)	225	-
Gravis Eliminator Card	29	-
Gravis (Joystick)	39	34
CH-Flightstick	49	-
Pro Audio Spectrum	239	-
Thunderboard	99	-
Thrustmaster	79	-
Thrustmaster Weapons	79	



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STRATEGY

PRE WW II

	IBM	AMI
Bandit Kings China (KOEI)	39	39
Battles of Napoleon (SSI)	36	-
Civii War Vol. 1 (SSG) or 2 or 3	25	-
Genghis Khan (KOEI)	37	37
Gettysburg (SSI)	39	-
Gold of Americas (SSG)	25	25
Grand Fleet (SIMCAN)	39	39
L'Empereur	38	-
No Greater Glory (SSI)	43	-
Nobunaga's Amb. 2 (KOEI)	39	-
Prelude to Jutland (GQ)	29	-
Red Baron VGA (DYNAMIX)	42	37
Romance 3 Kingdoms 2	42	42
Warlords/Enhanced (SSG)	32	32

WORLD WAR II

Aces of the Pacific	47	-
Action Stations V. 3.2	32	32
Action Sta. Data	17	17
Air Raid Pearl Harbor (GQ)	29	-
B-17 Flying Fortress	Summer	-
Banzai (GQ)	29	-
B. Tank Barbarosa (S.C.)	39	39
Bismarck (GQ)	29	-
Carrier Strike	42	-
Fleet Med (SIM CAN)	39	39
Herdes of 357th	July	-
Heroes of the 357th	April	-
In Harm's Way (SIM CAN)	39	39
Malta Storm (SIM CAN)	39	39
Mariana's Turkey Shoot	29	-
Midway (GQ)	29	-
MBT Kursk (SIM CAN)	39	39
Pacific Storm (SOLOM)	39	39
Pacific Storm (MIDWAY)	39	-
Panzer Battles (SSG)	25	34
Patton Strikes Back (BROD)	28	-
Perfect General WW II Disk	22	22
Rommel N. Africa (SSG)	28	-
Second Front (SSI)	39	39
Secret Weapons Luft.	44	-
P-38 (LUCAS) (SWOTL)	20	-
P-80 (LUCAS) (SWOTL)	20	-
DO 335	20	-
HE 162	20	-
Silent Service 2 (MICROPR)	36	36
Their Finest Hour/Battlehawks	44	19
Third Reich	August	28
Typhoon of Steel (SSI)	17	39
V for Victory	Summer	-
Western Front	39	-

SCI-FI

Armada 2525	34	-
Breach 2	21	34
Imperium (E.A.)	28	28
Reach for the Stars (SSG)	28	28
Robosport	38	-
Rules of Engagement	39	39
Second Conflict (Windows)	34	-

JUNE SPECIALS

Buck Rogers 1	15	-
Dragon Strike	15	-
Typhoon of Steel	15	-
War of the Lance	15	-
Pools of Radience	15	-

MODERN

	IBM	AMI
Adv. Tac Air Com.	Summer	-
Avenger A-10	Summer	-
Chuck Yeager Air Combat	39	-
Conflict Korea	37	-
Conflict Middle East (SSI)	39	39
F-117A Nighthawk (VGA)	43	-
F-15 III	Fall	-
Falcon 3.0	45	-
Global Effect	34	34
Gunship 2000 (MICROPR)	38	-
Harpoon v.1.2 (360)	33	33
Harpoon #2 Or #3	20	20
Harpoon #4	22	22
Harpoon Designer Series	34	-
Harpoon Scen. Edit. (360)	28	28
Harpoon Challenger Pack	43	43
M-1 Tank Platoon (MICROPR)	36	36
MBT Centr. Germany (S C)	39	39
MBT Middle East	39	39
MBT North Germany (S C)	39	39
Megafortress (360)	39	39
Megafortress Mission Disk #1	24	July
Megafortress Miss #2	24	-
Red Storm Risin. (MICROPR)	19	19
Shuttle	37	-
7th Fleet (SIM CAN)	39	39
Team Yankee (EUROPEAN)	32	39
Team Yankee 2	-	32

GENERAL

A-Train	June	-
Civilization	38	-
Command HQ (MICROPL)	34	-
Global Conquest	39	-
Lost Admiral	38	-
Perfect General	38	38
Perfect General WW II Disk	22	22
Populous 2	-	39
Populous World Editor	-	15
PowerMonger (E.A.)	July	34
PowerMonger WW I Disk	-	22
RailRoad Tycoon	34	34
SimAnt	38	38
Sim City (MAXIS)	34	34
Sim City Graphic Set #1 or #2	15	15
Sim Earth	45	-
Sim Life	Summer	-
Theatre of War	34	-

SPORTS

Hardball	37	-
Jack Nicklaus Signature Golf	-	-
Jack Nicklaus Unltd.	-	39
Links	39	39
Links Disks 1-6	16 ea.	-
NCAA College Football	37	-
NFL Pro League	47	-
The Games/Winter Challenge	36	-
Tony LaRussa	34	-
LaRussa '90	15	-
LaRussa AL or NL Stadiums	15	-
LaRussa Great Teams '01-' 68	15	-
LaRussa Fantasy Managers	15	-
LaRussa Classic Stadiums	15	-
Madden Football	-	34
Micael Jordan Flt.	42	-
MLBPA Stats '90	15	-
Pro League Baseball	-	-
Solitare's Journey	38	-
Wayne Gretsky 2	36	36
Hockey League Simulator	28	28
Weaver Baseball 2.0	20	-
Commissioner's Disk	15	-
World Curcuit	Summer	34

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is craft. Therefore, they urged game designers to know their market before they start writing. They suggested that successful writers cater to the audience by designing the type of universe and story that their audience is expecting. Designers were encouraged to develop characters, both heroes and villains, in shades of gray. Heroes can become so in spite of flaws and villains can become so by accident. Characters were defined as being individuals in relationships. Characters do not stand alone. Both writers suggested that designers give quirks to their characters and have fun with those quirks, but cautioned that the idiosyncrasies had to make sense.

Next, the two scripters suggested that storylines need to have two arcs: action/plot and character development. Without both arcs, the story is an incomplete and unsatisfying half-circle. Finally, every story requires a payoff which must feature emotional punch and offer reasonable explanations for all the loose ends left unravelled by the game action. Last, but not least, the experienced writers underscored the necessity of retaining ancillary rights. Designers were reminded that their characters could become the next Saturday morning cartoon hero or comic book villain.

Art Without Losing Your Shirt (Michael Becker, Manager of Graphics at EA)

The cost of computer game graphics is skyrocketing. Michael Becker shared some of the current problems and possible solutions to the game developer's dilemma with regard to art. Becker observed that the increased storage space available on CD-ROM and the extended number of pixels available in SVGA or 8514 graphics only exacerbate the problem of keeping graphics costs to a reasonable level. Adding to the difficulty is the fact that the audience of potential customers is becoming increasingly "media savvy" and, hence, require higher production values. He estimated that it will require 120 man months (10 man years) to fill a CD with quality art. He also observed that today's larger games spend $100,000 plus on the graphics for a single product, but the goal should be more around the $40,000-50,000 range.

Becker listed four major pitfalls in the current environment for developing art for computer games. First, he considered the fact that most companies simply do not estimate enough art for games at the beginning of a project. Second, he noted that many artists are paid via "open-ended" contracts where the meter keeps running. Third, many artists are burned out by overwork and time constraints. Fourth, he suggested that all too often there is a violation of copyrights where artists use the old "scan and modify" quick art fix.

Becker made several suggestions for improving the current environment. First, he suggested that developers pre-plan "downsizing" art from computer game and CD products to cartridge products. This would include archiving every image. Second, he recommended that companies attempt to hire "high end" artists as opposed to hiring "cheap" artists. If top artists are involved from the outset, it is easier to scan and use "storyboard" art as alpha-prototype graphics and will, of course, keep the look consistent throughout the project. Third, he urged all design teams to visual all animations at an early stage, since they will cost multiple times the price at the end. Other suggestions involved the use of scanners, video frame grabbing and building one's own copyright-free photographic library.

Multi-Player Games (John Taylor, *Air Warrior* and *Multi-Player BattleTech*)

John Taylor presented a list of six design considerations for multi-player games to be featured on commercial telecommunications networks. He stated that designers should: 1) realize that these games exist for a social purpose, so 2) the interface must leave room for players to type their communications. Then, he observed that: 3) games which are to be played for years must have a broad dynamic range (so that experience players don't immediately give the "Wand of 'I Win'" to new players and 4) the software should be expandable (**Kesmai** still has 10 year old code in operation). Further, he cautioned that: 5) the game should not behave differently between types and speeds of personal computers (even perceived differences will cause rumors that can cost usage). Finally, he observed that 6) one must decide whether to have human game masters or not (**Kesmai** usually does not).

Taylor then moved on to what he called "Design Issues." First, he said that designers must figure out some business criterion for the game (i.e. how many players at what quantity of host time does one need in order to make money). Second, designers must have a plan for keeping the game resources dynamically restocked (with no players hogging resources and the East Coast not depleting supplies which will be needed later in the evening by West Coast players). Taylor told a fascinating anecdote about businessmen discovering at what times certain artifacts were being generated and ordering their secretaries to log in during business hours long enough to grab those artifacts. Third, he cautioned that single solution problems/puzzles are not a good idea, since the first person tells a minimum of his/her buddies and the chain continues through their buddies until everyone knows the solution. Finally, he observed that most human players do not like to compete with each other. Even though there are those that want to win at any cost, there must be balance between the casual and fanatic player with rewards at all levels of play. To this regard, he suggested that designers should *never* trust anything the player's computer comes up with.

Taylor closed his presentation with some predictions about future trends in multi-player games via telecommunications services.

1) Games will become more graphically intense.

2) Games will be reduced in price to $3-4 per hour via club rates and package deals.

3) Flat rate services will increase if **The Sierra Network** succeeds and this will cause player demographics to shift from adults to teenagers.

4) Higher baud connections will be implemented soon.

5) Higher development costs will cause networks to offer more multi-player versions of successful single player games.

(Next month: More from the Sixth Annual Computer Game Developers Conference)



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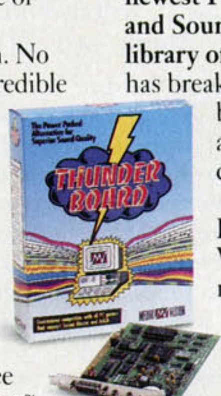
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Encyclopedia Lemicologica

Part I of Solutions to the Taxing Levels in Lemmings

by Amateur Lemicologist Robert Gardner, Jr.



Taxing 1: If at First You Don't Succeed — MFIBAJLNFS

Make the first Lem a climber. When he has gone over the first of the broken columns, and is about to start up the stairs to the next, go back and catch a Lem coming off the steps on the left and make him dig. When he is "Lem" deep, have him bash. When #1 reaches the top step on the left side of the last column, have him bash through to save time. Let him walk down to the lower part of the slope at the gap and build to the other side. Once he drops off his last bridge (you can mine to get him off faster if you like), let him walk on up to the top of the next set of steps and build over the trap and to the exit. The others should be getting there just about this time.

Taxing 2: Watch Out, There Are Traps About — FIBIJLMOFL

Have the first Lem out of each chute hit the ground diggin'. Make the Lem on the left dig next to the retaining wall and have the one on the right dig instantly. In both cases you may lose the second Lem from each side unless you take corrective action to save them. In both cases you can simply have the second Lem dig in the same hole with the first Lem. When the hole is deep enough to contain the other Lems (about two Lems deep is good), then build to stop all four diggers. Turn up the Lem flow to 99 and then start digging again in each hole. When your Lems are safely out, bash through the "lumpy" column of rock on the left, then make a climber go over to the red column and build over the trap. After he drops from the end of his bridge, let him begin to build from a point just about half-way to the gap. That way, his last bridge will end over land and the builder will not walk back toward the trap. Go back now and have a Lem bash through the red column, releasing all the others.

Taxing 3: Heaven Can Wait (We Hope!) — IBANLMFPFY

This is just one possible solution. Have Lem #1 build from the edge and keep an eye on him while doing the following: Quickly make #2 a digger and, when he is in over his head, have him build to stop him. Catch a Lem just out of the chute and make him dig until he is about "Lem deep," then have him bash. He will be digging an open trench, deep enough to keep all the returning Lems from climbing out of it (a contraption known as a Lem-Pen). When he gets to the pit dug by #2, he will stop bashing. Catch a Lem behind the basher and have him build a bridge that, when completed, will be short of the pit dug by #2. Once #1 is almost to the exit, go back and restart the bridge in the trench. That will free all the little fellows who, thereafter, will be eternally in your debt.

Taxing 4: Lend a Helping Hand — BINLMFIQFR

This one is really easy, but not the way most people approach it — the way that looks to be obvious. First, put a blocker in front of the snare on the right. Next, go back to the left side and make a digger of a left-moving Lem. As soon as he is "Lem deep," make him bash. This is the only tricky part, for he must both bash a trench that is open on top but deep enough to get under the wall between the two sections. With that done, the level is won. When he digs under the blocker, the blocker will be released, although releasing him is not critical to the completion of the level. Now make a blocker behind the basher. If you end up with two or three little waifs between the basher and the blocker, don't worry about it, you can spare them. As soon as

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the basher emerges from the base of the column, have him build. Let him build a series of bridges to the column on the right, turn and *instantly* build back to the left. When his bridges run into the top of the structure, he will turn and walk back down his bridge — but that's OK. When he returns to the top, he will climb up to a point where he can bash. Let him do that and at that point, if not before, blow the blocker below and watch the Lems come home. Have you ever wondered what holds those incredibly long bridges up? I think the engineers at Georgia Tech could learn something from these little guys.

Taxing 5: The Prison — FAJHLDHBGT

The first Lem should be assigned blocking duty on the right. The next should build to the left, ending just at the projection at the base of the left column. Build from the top of the projection to the area at the top of the metal "flamethrower" block. After building past the chute, have a Lem block the stairs to isolate the builder. When she reaches the metal block, she will probably walk back down to the blocker, back up to the block and over the top. Have her bash through the pipes and start building to the other side. When she gets to the pipes on the far right, have her bash and quickly build to get inside the pipes. If you are good with the F11 key, you may bash/build, bash/build and get well inside without a problem; if not, she will turn and head left. In this case, build back up to the pipes above those "flamethrowers" and this will seal her in. The object now is to make her dig down between the pipes until she reaches the floor, then bash to the exit. If she should happen to fall between the pipes, then use the F11 key to be sure she is facing right and let her bash through to the exit. Now all you need to do is detonate the blocker and repair the hole she leaves in the bridge. (Note: Assigning a sex to a Lem is a difficult process requiring a quick eye and a very large magnifying glass.)

Taxing 6: Compression Method 1 — IJHLDHFCGM

Here's a suggestion for the best possible score on this one. First catch the #1 Lem out of the chute on the far right and, when he turns to the left, have him bash into the base of the column. (We'll get back to him.) Go to the far left and catch the first Lem out and let him walk off the edge and drop twice. On the second drop, make him into a blocker. Go back and catch your basher and while he is under the column, have him dig until he is just deep enough to stay in his trench once he clears the column, in other words, about "Lem deep" in relation to the floor. Then let him begin to bash again. Now just sit back and watch. All Lems will now collect behind the blocker. When the basher and his followers are in place, detonate the blocker. All Lems will now be in a tight little group. You will lose no more than one to each of the hammers, giving you a very high percentage of Lems saved and believe me, those little guys appreciate that. Remember, they have wives and children to go home to after this thing is over.

Taxing 7: Every Lemming for Himself! — NHLDHFADGJ



Let the Lemmings walk over the hill to the right of the exit. Make the lead Lem a climber. When #2 is near the one-way hill, make him a blocker. Let the climber get over the hill, then walk up to and build into the little bump at the right edge of the platform. That will turn him around and send him back to the one-way hill. Have him bash back through it. He will then run into the blocker and head right again. Let him walk down the rope to the tall rock. Build over to and let him drop onto the lower rock. From that point build to get to the next rock. Start the last set of stairs there to reach the exit. In the meantime, go back and blow up the blocker. Time it so that the mob gets there just after the bridge is complete.

Taxing 8: The Art Gallery — HLDHFINEGS

This is one way to do this, but certainly not the only way. Make Lem #2 build right out of the chute, to slow him down and give #1 a little head start. Make #1 bash through the first pole. To buy a little more control, make him start low, on the ball. Then let him build across the first two balls to be sure no Lems get trapped in between. Bash through the second and third balls and increase the flow to 99. Let one of the last Lems build a bridge between the last two balls, leaving all his little buddies trapped down below. Bash through the last pole, build to the exit, then have the trapped guys bash to the right.

Taxing 9: Perseverance — LDHFAJLFGL

Have the first two Lemmings dig downward, side by side, at the right side of the landing block. When they have dug halfway down the block, stop them by turning them into builders. Finally, bash a tunnel through the left side of the block, freeing the Lemmings.

Taxing 10: Izzie Wizzie Lemmings Get Busy — DLGIJNLGGL

This isn't the most elegant of solutions — but it works! When the first Lemming hits the turf, have it build stairs to the right. From the second platform, build to the right. Then make all of the Lemmings builders (clicking on them as fast as possible) so that they all make it to the third platform. On the third platform, build a few steps close to the right wall (not high enough for the Lems to climb), and then bash through that wall so that there is a small film of "land" underneath the basher. The Lemmings will fall to the fourth platform, where one Lemming can build stairs out. They must do the



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"group build" thing again to move up to the exit.

Taxing 11: The Ascending Pillar Scenario — LGANNLDHGY

The first Lemming to hit the dirt must dig down and then bash to the right, so that there is a small film of earth covering the Lem-pen it is digging. Next have a climber scamper out of the pen to the left and build a stairway all the way up to the last pillar. When in the middle of the last pillar, the Lem must dig down halfway through the pillar, bash to the left, then build a stairway over the small chasm to the left. Build stairs out of the Lem-pen to the left.

Taxing 12: Livin' on the Edge — GINNLDLIGR

The first Lemming must begin building stairs spanning the chasm to the right. Next build a Lem pen by turning the next two Lems into blockers. When the bridge-building Lem reaches the wall on the right, have it bash through and build a series of stairs up to the exit. Blow the right-hand blocker.

Taxing 13: Upsidedown World — FAJHMDHJGM

Put a downfield blocker on the right. Make a climber of another and, when he is at the first "root" on the "arrow hill," let him mine. When his head is level (or just below level) with the trap, make him bash. If he is at the proper level, he will stop bashing after going under the large mound just prior to the second "arrow hill." Let him walk over the hill and a very small depression will be visible just before the exit (between the second and third "roots"). Have him build in that depression and the *instant* he turns, instruct him to mine. When he is level with his first tunnel, make him bash again. Let him walk so that when he is on the first "arrow hill" and level with his buddies, bash them to freedom.

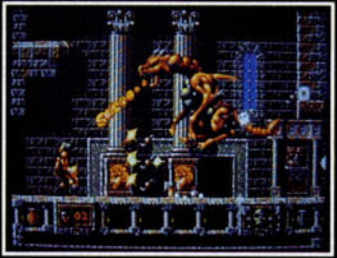


Taxing 14: Hunt the Nessy.... — IJHMDHFKGV

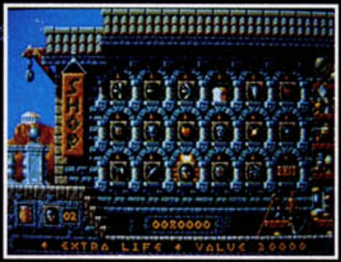
This one is primarily a bridge-building marathon. Let the "point-Lem" walk to the edge and build. Place blockers to the left and right to contain the others. Keep building until the long neck of the "monster" is reached. Build over to the neck and make sure the bridge is complete, then bash. If he should turn around, that's all right, just let him build into something to reverse him. Once he has started to bash, command him to mine



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Computer Game Review

Available May 1992 for MS-DOS and Amiga.

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Progression puzzles include sequences of lever pulling while reward puzzles will have you collecting objects and using in-game teleports.





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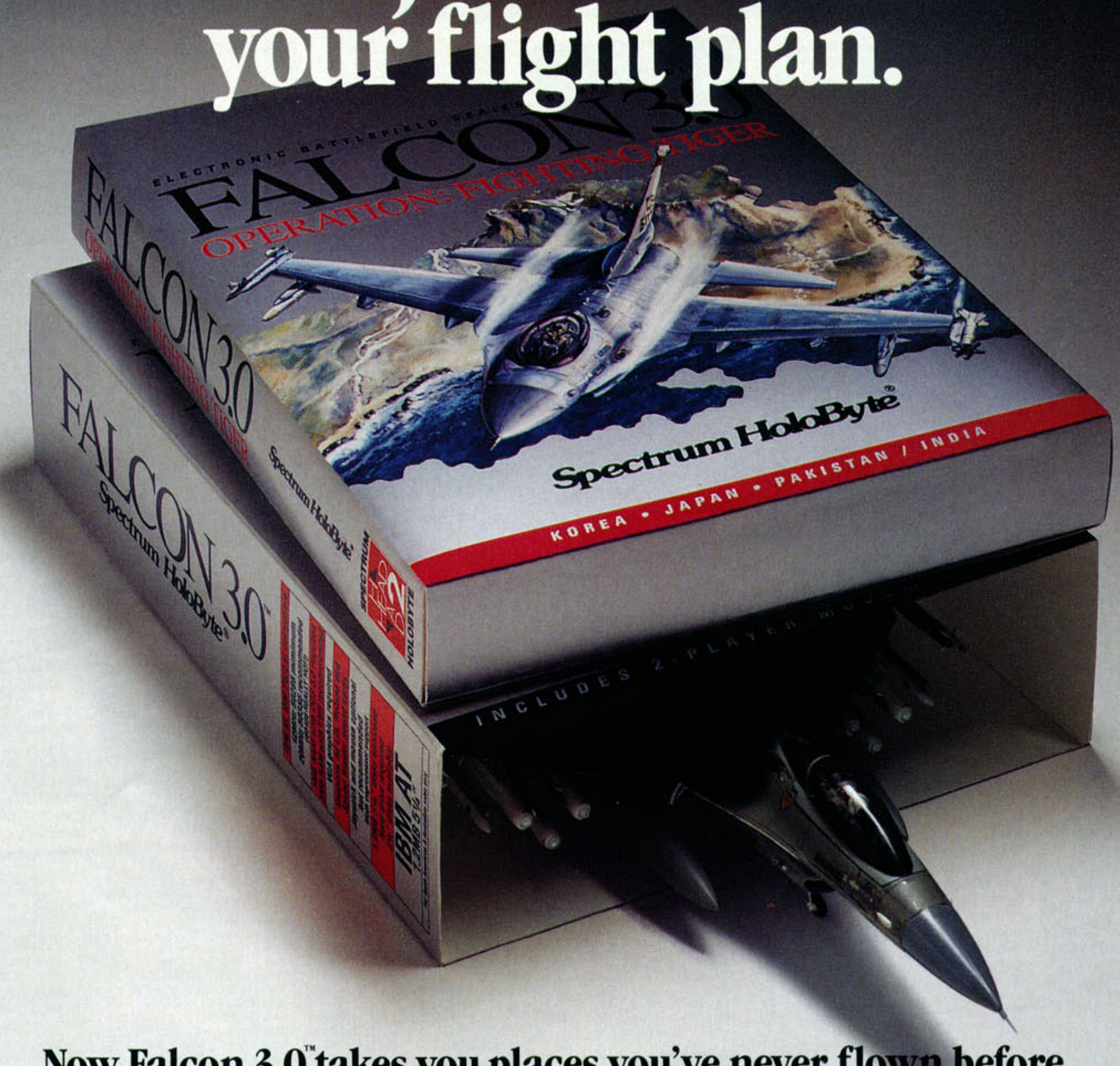


and, when he breaks through, make him dig. Allow him to dig down an inch or so on the screen and then build again. Let him drop off on the rock under the "nose" and from there, build over to the exit area. Once he has started on his last build from this rock, go back and detonate the right side blocker, releasing the other Lems. The well to the left of the exit will block the Lems, so it should be built over. This writer likes to build from the center of the bridge, running down from the outcropping to the surface at the left of the well.

Taxing 15: What an *Awesome* Level — NHMDHFALGS

There is little doubt that this level was created by a mad Lemming scientist. He wasn't crazy, just mad. Still, what does one expect from a Ph.D. who flunked recess? Anyway, this gamer is almost certain that this creature is a cross between a dragon and a caterpillar. The difficult part seems to be getting them to mate. Anyway, this solution is not easy to explain due to all the little "hairs" and "spikes" all over, but we'll give it a try. Begin by making a blocker under the exit and then watch the first Lem. At the exact place that he turns around, have the next one bash. As he bashes, try to single out one Lem and make him a blocker behind the basher. If one or two are lost this way, don't be concerned. When the basher breaks out, *instantly* make him dig and let him go for about 6-8 scoops, then build. If he isn't made to dig, he'll turn back left because of the overhang. Let him build two bridges. Let him walk up after he makes his fall and note the point where he turns around. Let him come back to that point and bash. As soon as he breaks into daylight, have him build. When he turns left, make him build again to turn him back to the right. Let him walk up to the top of the thing that looks like a caterpillar with ears and build from the "ear" on the other side. He may hit a blue star and turn after the first build; if so, then just build against the left "ear" to turn him back again. When he drops off after the second build, have him bash to the right so that he emerges between the top two large "spines." When he breaks through, let him go over (or through) the first spine he encounters and build from the top of the next one. Keep building until the top spine on the large dragon head is reached. (He may turn once or twice while building, but don't worry, because he isn't going anywhere.) When he walks up to that last spine, he will walk over it and out the exit. At some point prior to this, the blocker is detonated, releasing the others. CGW

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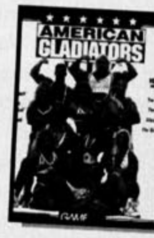
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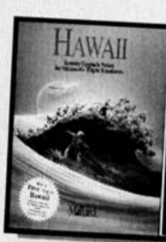
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Circle Reader Service #81

From the Cockpit

Part One: What Are *All Those Instruments?*

by Timothy Trimble



Most armchair pilots who climb into the cockpit of *Microsoft Flight Simulator* are familiar with only the basic instrumentation of the cockpit dashboard. Usually, it is just enough to get the plane in the air, keep the top of the plane above the bottom of the plane and then attempt to land again (one hopes in one piece). While there is a lot of enjoyment to be found in this mode of flying, there can be much more enjoyment in learning about the rest of those "strange" instruments.

The instrument that gains the most recognition is the Artificial Horizon (or Attitude Indicator). This instrument has the responsibility of showing the pilot the position of the aircraft (the attitude) in relation to the natural horizon of the earth. Normally, in clear weather, this is not too important. When it is night, however, or the weather is so bad that the pilot can't see out of the windshield, this becomes the most important instrument on the dashboard. Besides showing that the plane is pointed below or above the horizon, it also displays, in degrees, the amount of bank that the aircraft is using in a turn. The arrow at the top of the instrument is called a "sky pointer." While the aircraft is in a bank, the sky pointer will help show the amount of bank that the aircraft is in by pointing to one of the outer markings on the rim of the instrument. The first set of marks (dots) are for 10 degrees of bank, the next (second dot) for 20 degrees, the next mark (third dot) will be 30 degrees and the last marking (fourth dot halfway between the last mark and the actual horizon line) is for a 60 degree bank. Finally, for those special gut-wrenching flights, the full vertical bank with the sky pointer on the horizon line is for 90 degrees of bank.

An instrument that is related to the Artificial Horizon (and can sometimes act as a backup in case of instrument failure) is the Turn Coordinator. This sits at the bottom left of the instrument dashboard. The Turn Coordinator also has a set of markings on the outer rim of the instrument, but *this* time, they are below the horizon line. The bottom of the instrument also has the words "2 MIN," meaning "two minutes." When the aircraft is banked into an attitude that causes the miniature aircraft's wing tips as displayed on the instrument to touch the lower markings, it will take the actual aircraft two minutes to make a full 360-degree turn (a complete circle). This will vary with the speed of the aircraft. On most heavy jet aircraft, the markings are for four minute turns. The Turn Coordinator instrument also has a little ball suspended in fluid in a glass tube, called a Slip Indicator. This shows the "quality" of the turn. When a turn is executed with the ball centered in the middle, the turn is perfectly coordinated. Since most armchair pilots fly with the ailerons and rudder locked together, all of their turns will be perfectly coordinated. For the more daring, however, the Slip Indicator will show if too much or too little rudder is being used for the turn.

The Airspeed Indicator speaks for itself *except* that it expects everyone to think in Knots. For those that prefer to think in miles (statute) the calculation is 1 Knot = 1.1508 miles. In addition, there is a marking on this instrument that sometimes gets ignored. It is the thick diameter line that runs along the lower speed section of the dial. Once the end of the thick line is reached by the indicator, it means that it is now safe to lift off the runway during takeoff or that the aircraft is about to become a rock (a rapidly falling object) while in the air.

The instrument just below the Artificial Horizon is the Directional Gyro (also called the Heading Indicator or DG). While the purpose of this instrument is simple (to show the heading of the air-

craft in degrees), a certain characteristic about the instrument is not so well known. Since the instrument is based on a balanced spinning gyro, it tends to drift from the "true" heading over a period of time. Most armchair pilots do not notice this since *Microsoft Flight Simulator* defaults to having this feature turned off. However, if "Gyro Drift" is turned on, the armchair pilot will have to calibrate the Directional Gyro on a periodic basis to match it to the heading of the Magnetic Compass (adding to the realism).

A similar type of situation also occurs with the Altimeter (on the right side of the Artificial Horizon). This instrument keeps track of the current altitude by changes in the barometric pressure (i.e. as the aircraft climbs higher, the pressure becomes less, and as the aircraft descends, the pressure becomes greater). Of course, altitude is not the only thing that affects barometric pressure. Weather can have a big effect on the current barometric pressure. By turning on the Barometer Drift (Realism option under SIM menu) this effect can be experienced. A good habit of the "realistic" armchair pilot is always to set the Altimeter before beginning a descent or adjust it on a periodic basis while on long flights.

The Rate of Climb Instrument is also one of those self-explanatory instruments. When the needle is above the 0, the aircraft is climbing, and when the needle is below the 0, the aircraft is descending. The numerical markings are in hundreds of feet per minute. However, special attention can be given to this instrument if the armchair pilot is interested in making "textbook" approaches and takeoffs. During takeoffs, a standard rate of climb for the type of aircraft can be used. Temperature, barometric pressure and weather can all have an effect on the rate of climb for the aircraft. If the plane is sitting on a runway in the mountains (12,000 feet up) and it is a hot summer day (80 degrees plus), the rate of climb for a Cessna 152 could be as low as 80 feet per minute. At sea level, on the other wing, it could be 630 feet per minute. This can make a lot of difference in trying to clear those tall trees at the end of the runway!

A lot of flying skill can be developed by paying closer attention to these instruments and their functions. One good test of an armchair pilot's ability to fly by the instruments is to have someone else (besides the pilot) set up full cloud cover from 5000 ASL (Above Sea Level) to 15000 ASL. Place the aircraft in an unusual position at around 10,000 feet altitude, pause the simulator and then let the pilot take over. ("Let's see, descending at 2000 feet per minute, in a spin, means I'll hit the ground in about 5 minutes. Plenty of time to recover...." Yeah, right!)

Till next time (Hum, altitude 3000 feet...), this is Timothy Trimble (...descending at 1400 fpm...), From the Cockpit (...at 60 degrees of bank...), saying "Watch those instruments!" and keep an eye out for Part Two of "What *Are* All Those Instruments?" when we deal with the navigational instruments. (...oops, there's the ground!) CGW

Letters from Paradise



I Love "Lusi"

I have been waiting 28 years for the opportunity that you have just provided me. I will probably never get another opportunity like this, so I intend to enjoy it to its fullest. You see, when I was in high school, I was obliged to study Latin during my five years there. It has been somewhat useful in an amorphous and vaguely indirect sort of way. But not visceral, or related to a personal preference like gaming.

"I came, I played, I conquered" translates into Latin as: "veni, lusi, vici." "Ludi," although a perfectly good Latin word, is the plural of "ludus" and means "the games" or a "public spectacle" (which usually involved more than one game, if the lions amongst you will humour the Christians).

The downside is that "lusi" sounds a bit wimpy to our ears, which may be more accustomed to visceral Anglo-Saxon monosyllables. Certainly, "ludi" is more likely to be recognized.

So, what's the problem if more people are likely to understand the incorrect version? In a practical world, not much, I suppose. However, less than adequate research in one area suggests a predisposition for less than adequate research in other (maybe more important) areas, too. In any event, to paraphrase Arthur C. Clarke: the willingness of people to believe in little green men from Mars, without adequate and rigorous substantiation, benefits only the demagogue and the dictator.

John Kula
Victoria, British Columbia CANADA

All right! So we goofed. We don't suppose you would buy the idea that it was an April issue and we were trying to fool you. Yeah, that's it! And we were planning to publish the letter of the first person to catch it and write in about it. Yeah! And we have a really big prize, too! Yeah! It's a date with one of the girls in Les Manley: Lost in L.A. *— and they'll be naked. That's the ticket! Just wait outside the Parliament building in Victoria at 3:00 P.M. on April 1, 1993 and they'll be there. If they're not there right away, just wait!*

Seriously, we did conjugate ludo, ludere in the wrong conjugation and we will use lusi when we next feel like wearing our classical mask. We eschew cleverness and euphony in favor of accuracy from this moment on.

Encyclopedia *CGW*

I am writing for several reasons. First, simply to say how much I enjoy *CGW* and, having been a continuous subscriber for more than six years, I feel qualified to render the judgment that it is a vital component of the computer gaming hobby at large. Thanks for the consistent quality, reliable, dependable publication schedule, my "money's worth," and invaluable assistance in evaluating new purchases of these very expensive games before I "puts my foldin' money down on the barrelhead!"

Second, I also have enjoyed and benefited from your handbook publications, such as *Chuck Yeager's Air Combat Handbook* and *The Official Guide to Sid Meier's Railroad Tycoon*.

Finally, do you know if anyone publishes a comprehensive guide to computer games, somewhat as a current encyclopedia? The two-part series on computer wargames that you ran was very helpful; however, since then, there are already many new wargames and combat simulators out. Additionally, I am interested in sports games, some role-playing, etc. It seems to me that if someone is not already publishing such a guide or newsletter, there would be a ready market for one. I cannot be the only one who sees, for example, the **Chips & Bits** advertisement in your magazine and wonders about the nature, quality, features, challenge, etc. of the dozens and dozens of expensive games, simply identified by title in a two-page listing. I know that **Chips** is working on a catalog that will certainly help, but it occurred to me that a comprehensive guide may already exist and that I just haven't noticed an ad for one. It also occurred to me that perhaps **Golden Empire Publications** might be prompted to fill such a deficiency in the hobby. Would it make sense to poll the readership on the desirability of such a publication?

Thanks once again. And congratulations. I am no publisher, but I do know that publishing a magazine is not easy nor particularly lucrative for most venturers. Yours is obviously a great success backed by a competent and energetic staff that emphasizes quality and meeting your deadlines. I sincerely hope *CGW* is around for a long time and suspect that it will be. Great work!

Thomas D. Ciampa
Los Angeles, CA

Thomas, there is not really any such encyclopedia or comprehensive listing on the market. The reason why publishing such an encyclopedia is not really feasible is touched upon in your letter. Even our paiktographies (annotated lists of games) are often outdated a few months after we compile them. Fortunately, we plan to publish at least four or five paiktographies per year in order to help our readers keep current. In addition to the wargames, M. Evan Brooks is working on a strategy game paiktography and Scorpia just finished a CRPG paiktography. We plan to offer more.

The closest book to what you are seeking is a **Bantam** *book called* Dvorak's Guide to PC Games. *The book does not pretend to be a comprehensive guide to games, but it does offer a considerable amount of introductory material on a lot of games in a lot of genres. Our editorial staff compiled plenty of material for that book and, while we are not entirely convinced that the best possible use was made of that material (writers never want their material edited down to someone else's formula, even if those writers are editors themselves), there is plenty of basic material for those who want to expand their computer game libraries.*

The Last Picture Metaphor

Like many of your readers, I am disenchanted with the delays in software these days, and I've read the articles and explanations concerning this matter. I do understand about these delays. As a matter of fact, software delays now fall into the category of things that one cannot do anything about (such as death and taxes). We might not be able to do anything about these things, but that doesn't mean that we can't get upset about them.

Back in January, I bought an IBM-compatible '486 33MHz computer with CD-ROM, mainly so that I would be able to run the new state-of-the-art software on it. With the exception of *Falcon 3.0* and *Wing Commander II,* I'm still waiting. And it upsets me when I visit my local software store, and look in the new release section, to find a company that is delaying *Strike Commander* until June (1992?) has produced a trilogy of old *Ultimas*. Why isn't that time spent getting the new *Ultimas* out or *Strike Commander*? Old programs are history! The advances in software make even some programs that were released in late 1991 obsolete, and I've seen $40 programs that were released in December marked down to $15 by February by a major software chain!

As far as sneak previews go, I'd rather not see them until the product was at least being duplicated on disks for mass production. I can understand that you want to be the first to report the latest and greatest. I think your magazine is great! Of all the computer game magazines, yours is the only one I buy every month. There is one magazine that doesn't have sneak previews per se but, when a program is reviewed, it almost always is available already or during the month of that issue. Which would you feel better about? A sneak preview that becomes "dreamware" for another several months or a review of a title that is available or available the next month after reading it? After the *Earl Weaver II-Tony LaRussa* comparison in a previous issue, seeing the finished product (as opposed to an alpha or beta) is believing.

Also in the April '92 issue is a comparison to the film industry. When a movie is advertised to be in a theater on June 15, that movie is there on June 15, and not delayed until July or August or September or October, etc. The thing with movie sneak peeks is that you know there will definitely be a set date to be able to watch it. Whereas with software, who knows?

Michael Moniz
Smithfield, RI

Although your letter was too long to print in its entirety, we felt that your disappointment should be addressed one more time. First, let us reiterate the fact that software took a major leap in production time required during the latter half of 1990 and through the 1991 calendar year. Much of this was due to the uniform move to VGA graphics and the move beyond the 512K RAM standard. Such a leap brought unexpected problems in software management and, as a result, unexpected delays across the board. The delays are not restricted to one company, but almost every company publishing state-of-the-art products was hard hit by the unanticipated increase in manpower required to bring projects to fruition. We think the problems will largely work themselves out to the point that there will be less vaporware over the next 18 months than there was in the last 18 months.

As for working on a remake of a product to the exclusion of working on new and long-awaited products, we simply have to say that it's not true! Creating software involves the use of many teams. Not all of the artists are working on one game at all times. They may do backgrounds for one game and move on to do characters for another game while they are waiting for the programmers to catch up on the first game. The same is true of sound teams and writing teams, quality assurance teams and low-level programming teams. You can bet that **Origin** *would not have put resources into a remake of an* Ultima *trilogy that would hold up production on either* Ultima VII *or* Strike Commander. *It was simply a matter of allocating resources efficiently while other work was being accomplished.*

Again, we appreciate your comments on sneak previews, but we still feel that it is a matter of not understanding the nature of the beast. Sneak previews are intended to be advance looks at exciting products without providing "buy" or "don't buy" recommendations. We enjoy writing sneak previews because they let us be "fans" as well as critics. We are fans, too! We are interested in all aspects of getting a game from concept to market and we enjoy knowing what design teams are trying to accomplish, as well as evaluating how well they accomplished their goals. In sneak previews, we get to focus on interesting aspects of the games that often get overlooked in reviews (of necessity).

Finally, the comments on film industry releases provide a false analogy. The film industry does not require technological advancement in order to survive. The computer game industry does. The film industry has had a stable platform since the early part of this century. The computer game industry is still shooting at a moving target. The film industry can afford to hold films in storage until the optimal release date. The computer game industry still lives largely from quarter to quarter and sometimes its companies must ship a product right away in order to survive until the optimal marketing season. The film industry can purchase its most effective advertising in daily newspapers with short lead times. The computer game industry must purchase its most effective advertising in monthly magazines with long lead times. The film industry only has to duplicate a small number of prints in order to meet the needs of a national opening as opposed to the tens of thousands of computer game disks to be duplicated prior to release.

In short, there may be parallels in the creative approach between the film industry and the computer game industry, but there is no parallel between those industries in terms of product release.

Ardai The Barbarian

Regarding your review of Virgin's Conan the Cimmerian in the February '92 issue. As the product manager, I would like to address several points made by your reviewer. First, I have no idea when Mr. Ardai received his copy of Conan, but the update for the game has been readily available since late October, 1991. In pursuit of complete customer satisfaction, I personally have taken a number of calls for our tech support department, and have yet to find an unhappy customer once the update was received. You might do your readers a service by informing them that we offer updates from Virgin's On-Line BBS, (714) 562-5030, or updated disks will be mailed (without any charge to the customer) if the customer mails or faxes his receipt or UPC symbol from the box.

To assist customers with the admittedly difficult task of moving Conan through the scrolling map, Virgin will mail maps for the Shadizar underground, Zamboula and Thoth Amon's Palace to anyone who requests them (also free of charge). Customers can mail written requests to: Virgin Games, Attn: Conan Maps, 18061 Fitch Avenue, Suite C, Irvine, CA, 92714; or can call (714) 833-8710, Ext. 45 and leave their name and address.

Second, I must clarify the degree of error made on the manual and errata card mentioned in Mr. Ardai's review. The symbol in error is shown backwards and is not the "wrong" symbol. In fact, there is no other symbol even remotely similar. Eighty-five percent of our customers have not even noticed the mistake or had little trouble determining which symbol on the screen it was referring to. A little embarassing it is, but monumental it is not.

There are few to no entertainment titles that are 100% "Bug-Free." I am not attempting to make an excuse found in the initial shipment of Conan, but I take offense to the statement, "Virgin is aware of them and claims to have corrected replacement disks available." There are no claims being made that are untrue. Perhaps, Mr. Ardai was doubtful based on the fact that it took Virgin four weeks after release to have an updated version available, much less time than most publishing companies. It is our commitment to customer satisfaction that drove many Virgin employees to work overtime and through weekends to make the fixes as soon as humanly possible.

Cathie A. Bartz
Virgin Games
Irvine, CA

Actually, the editor inserted the phrase about **Virgin** *claiming to have replacement disks available. This statement was not intended to cast aspersions upon* **Virgin***'s veracity, but to indicate that we had not actually had an opportunity to see, touch, load, boot and verify that these disks were available. We try not to put it in writing if we haven't seen it. Very often, time is at a premium when reviewing games. If one does not find out about an update until nearing a deadline, there may be insufficient time to run the update through its paces. We assure the dedicated folks in* **Virgin***'s customer support section that we are no more suspicious of their updates than anyone else's. We simply try not to affirm what we haven't experienced. As for your customer support policies, let us simply state that we certainly welcome them and find them laudable, particularly in light of policies such as those described in this month's editorial.*

Gatewood's World

Computer Gaming World is the most *venerable* computer gaming magazine of all computer gaming magazines. You've been around the longest. You've seen it all. Therefore, I would sincerely like to express my heartfelt opinion in your *august* pages, if I may.

I want to state that I'd like to take my right fist and put it through someone's face (you know from the nose to the back of their head type of thing , crush to mush). That someone is anyone pirating computer software games! I have nineteen computer simulations (simulations sound so much more sophisticated than games, heh!) Not one of them is pirated! Like they put on *Empire*, "pirating is just a fancy word for stealing. Against the law, you know? If these good for nothings would think about it, they would realize that they're cutting their own throats. These people steal games, the company doesn't make money and then, someone who has given us a ton of fun is out of work.

Concluding, I'm not working for any computer companies, nor trying to support them. I am a Texas Peace Officer, a cop who has been with the department for over a decade. And, if I ever catch anyone, "pirating" anything, they're going to jail, because I'm going to arrest them for *theft*! This crime is not only stealing from the companies, it is stealing from me and everyone else in the gaming community.

Steve Gatewood
Address withheld by request

"We're not worthy!" We sure try to be worthy of the kind of praise with which you began your letter, however. Sorry we had to print your letter in the July issue instead of the "august" pages [grin]. We do appreciate the serious aspect of your letter and hope "piracy" loses some of its glamor as a result.

Serial Thriller

Many of your articles mention playing "head-to-head" through a serial cable instead of a modem. What exactly is that and how much would it cost? I have two computers and I'd like to play games and download files between them, but not spend $2,000 on a big networking controller.

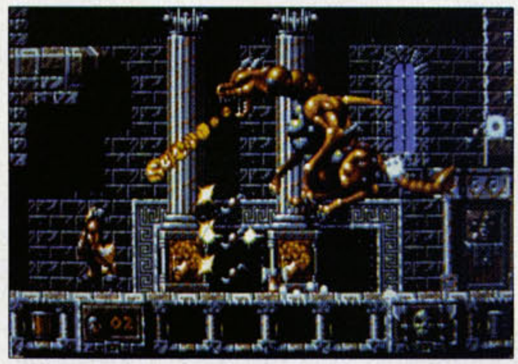
D. Hartl
Traverse City, MI

Here's the good news. A serial or null modem cable costs under $10 (usually) and allows one to connect two computers together via the serial ports. No modem or network controllers are necessary. With two computers in the same room or reasonable proximity, these can provide stimulating competition between human players. We like human-vs-human games. That's why we mention this possibility from time to time. One does not need a network controller for this style of gaming. CGW

Ye Gods

A Sneak Preview of Konami's Gods

by Martin Bowers and David Wilson



Ages ago, the gods built themselves a resort area. As is often the case with resort areas, the neighborhood began to decay. First came the thieves, soon followed by other forces of darkness. Before the gods knew it, their personal playground had become a haven for every monster imaginable. Years of idle living had rendered the gods lethargic and lazy. Instead of dealing with the forces of evil themselves, they decided to find a champion. As a result, Hercules came forward to take the challenge of disposing of the four powerful guardians who held the city hostage. His only request was that, if he should be able to vanquish the guardians who controlled the city, he be allowed to join the gods as an equal.

In *Gods,* the Konami release that allows the player to leap into the role of mythical hero in an adventure of Herculean proportions, the player gets to cut a legendary swath through four major levels, each divided into three sub-levels. Essentially, then, there are twelve levels to work through in order to reach the endgame, and each level is a highly confusing maze, full of trapdoors, monsters, traps, secret passages, teleporters, treasures, bonuses and, thankfully, weapon upgrades.

A"maze"in' Place

One major strength of this game is the unique design of each maze. Players will have to practically memorize each individual maze as the character works through the game. Hercules must discover the correct combination of levers to destroy traps, reveal bonuses and open secret rooms. The wrong combination can close off an area that the hero must visit, turn on monster generators or possibly, accomplish nothing immediately evident to the player. Playing with various lever combinations provides no small amount of diversion for the battle-weary champion.

Bats File

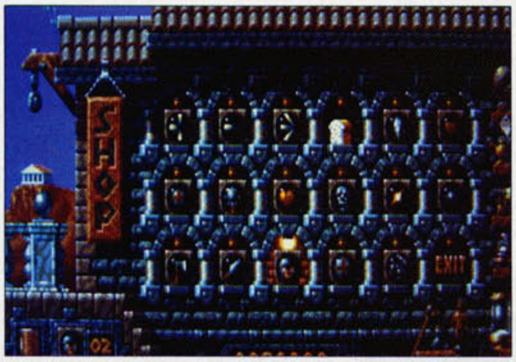
Another strength of this game program is the generous assortment of monsters provided. Each monster seems to have been designed with an exceptional amount of imagination. There are humpbacked monsters that resemble two-legged camels, ape-like beasts and flying creatures. Flying imps, hornets and bats are quite troublesome. Also, players will learn to beware of stone gargoyles that come to life and attack. The most imaginative creatures in the game were the "Slinky"-type creatures. These clever creatures move and attack like a Slinky toy. What an outrageous concept! In addition, all monsters have a different endurance level. Solely because most ape-like monsters die with only one attack doesn't mean that one attack will destroy *all* ape-like monsters. Some beasts are best left alone.

At the conclusion of the third, sixth, ninth and twelfth sections, players will encounter an enormous guardian, equivalent to the "boss monsters" found in the world of videogame entertainment. If the hero can defeat this awesome monster, he receives a password that will enable him to begin the next level. This password will be unique to every individual machine, as it is program-generated and saved. So no more trading passwords on the local BBS for lazy action players who just want to finish the game. Upon entering the password menu, the program will display the passwords for each level the player has completed. This feature would best be left out, since it means that passwords will be available to players who share a machine, whether or not they have completed a level. This feature does, however, grant the player freedom from keeping track of passwords via pen and pencil. A password cannot be lost.

Axe I, II and III

In the designer's quest for such an awesome assortment of ferocious monsters, weapons design was not neglected one bit. Players will easily ascertain which weapons work best for their own personal style of combat. At intervals, Hercules will be able to pick up weapon upgrades from fallen enemies. At other times, players will rendezvous with traders, who will sell weapon upgrades. Players will be glad that they gathered treasure and points because potential purchases are gauged by the number of points amassed. There are many weapons to choose from. The simplest weapons are knives which, like all weapons, are thrown. Also available will be fireballs, bombs, spears and hunter missiles. Hunter missiles (on upper levels) are great fun because they will zero in on any monster in the immediate area, whether or not the player was able to aim in that specific direction. Shields are available to make the player temporarily invincible. Players can then walk into traps or enemies and cause their immediate demise without receiving any injury themselves.

In addition to encountering monsters and traders, players will quickly discover



thieves. Perceptive players will soon discern that thieves can get into sites that are inaccessible to anyone else. Heroes can lure a thief who obtains a desirable object or artifact. This is accomplished by dropping one of the items in the player's inventory. When the thief approaches the discarded item, he can be attacked and the player can snatch both items for his own use. Even with his great strength, Hercules can carry no more than three items at any one time. Due to this limitation, Hercules must judge which items are more valuable to him. Items that must be transported from one location to another include gems, jars, weapons and keys. Different treasure chests will vary in value, so players may opt to carry only the keys to the more valuable chests as a means of saving space. If dropped in the correct place, items may later be retrieved.

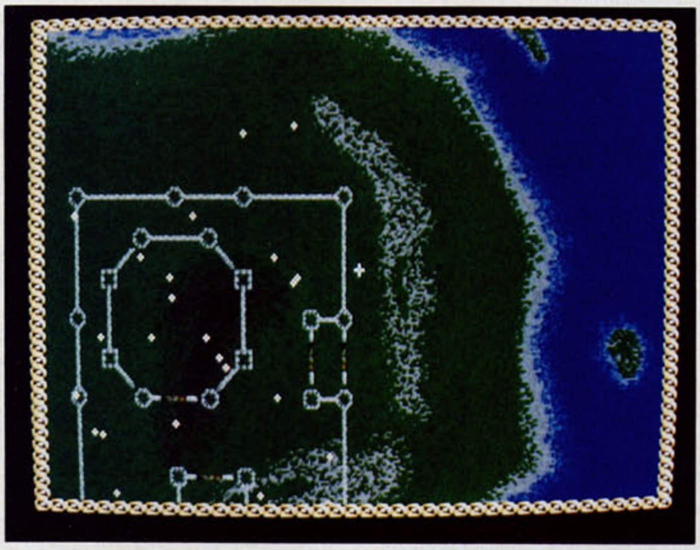
Fire in My Bitmap

The manual recommends the user's machine operate at a minimum of 12 MHz. For this preview, the game was run at 12 MHz and 40 MHz. At both speeds the game operated well and was quite playable. One of the previewers found the 40 MHz operating speed a little hard to handle, but only slightly. *Gods* offers satisfaction on several layers. One is as an action game: The combat is fast and furious, no matter which path is chosen. The other layer involves exploration and puzzle-solving: There are enough variations within the puzzles to keep even the most intuitive player guessing and there are a multitude of solutions to each world. Prometheus took fire and gave it to primitive man to advance civilization. The Bitmap Brothers, developers of *Gods*, have given us an action-oriented romp that is sure to advance the future of quality arcade adventures for our home computers. CGW

The Medieval Developer's Guide to Pre-Fab *Castles*

or How to Build a Home and Still Have Time for Your Barbarians

by the King's Carpenter, Omar DeWitt



Castles is a time-consuming game. It offers attractive graphics and some interesting events, but things happen very slowly and it regularly takes many hours to build a castle. This article should help keep the "dol" out of any monarch's "drums" by suggesting ways to speed things up. Of course, "speed" is, here as in any computer game context, purely a relative term.

The First Principle: K.I.S.S.

Before being able to speed play, one must be willing to play the game a few times, putting one's heart and soul into the castle design, just to get the creative juices out of one's system. Design, the interesting part of building a castle, turns out to be irrelevant in game terms. A simple square castle will be just as successful as an elaborate one with protected gates and a strong keep. To save time, then, the wise monarch simply plans for a simple, square castle with enough pieces to hire an adequate army (confer with the counselor). In fact, monarchs who spend very much time designing elaborate castles are actually penalized. Before one can hire enough soldiers to protect the castle under construction, the locals arrive and raze the castle's foundations before the workers can raise its walls. Then it's back to Stone #1.

Back to Work! A Foreman's Tale

Most of one's time will be spent trying to keep the workers working. They stop when their section of the wall is too much higher than its neighbor and they stop when the castle is attacked (and they may or may not go back to work after the attack). They stop for reasons known only to medieval computer peasants and, of course, they stop for winter. The player's main function in *Castles* is to get them back on the job. The workers on towers and gates seem to be more dedicated to their work than those on walls, so it can be useful to build a castle which simply consists of towers. Each wall section should have two or three workers assigned on the offhand chance the forces-that-be decide to build there. If there are no workers assigned, of course, there will never be any building. Yet assigning more workers is no guarantee that building will begin. It's all left up to digital whim.

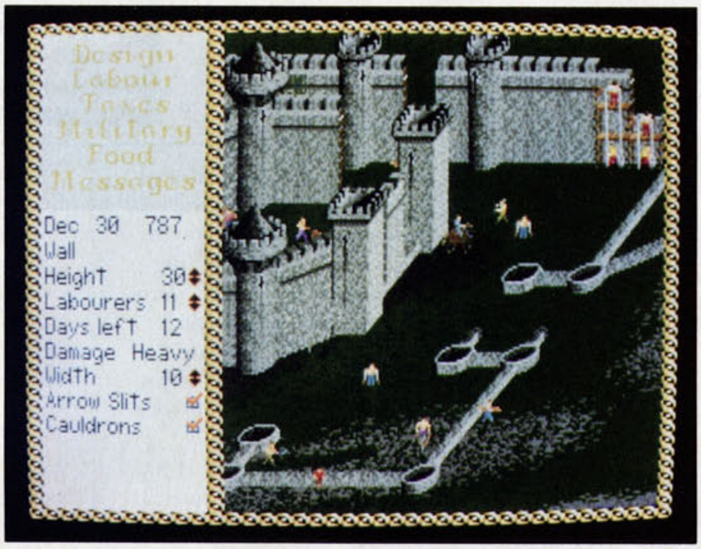
The mix of seven types of workers will also affect the speed of building. Finding a "satisfactory" mix is relatively easy. A "good" mix can be had with 80 of each type, but 100 of each type is classified as "satisfactory." A phone call to Interplay elicited the information that getting an "excellent" mix is "not easy." It seems to be mostly a result of trial and error, but these rough guidelines were passed along. The numbers of Diggers and Carpenters should be equal and "high." The number of Masons should be a bit lower. Quarrymen, Carters and Smiths should be "medium" in number, and there should be zero Laborers.

Covering Your Buttress (Strategic Defense)

Another strange aspect of this game is that the walls and towers are not there to protect the soldiers as one might naturally expect. The goal, gamewise, is for the soldiers to protect the walls and towers. Gamers have not succeeded until the castle is finished and, appropriately enough, the castle isn't finished until the walls and towers are built. Soldiers are cheap; it doesn't cost any more to recruit than it does to maintain the soldiers. When the attack is announced, place the archers on the walls and towers and the infantry outside the walls. Together they should be strong enough to keep the enemy from doing any damage to the castle. One should always buy the maximum number of soldiers available according to castle size and increase the number

of infantry (or speed up recruiting) by offering them more money. The moat also delays the enemy and should be dug immediately after the soldiers are hired and the design completed. (Digging it before the design is completed means that one is likely to have a moat *inside* the castle as well!)

Battle is an unnecessarily long process — often three minutes or more. So, if the soldiery is up to muster, forget them and go take care of business: levy taxes, buy food and chat with the counselors. According to the rule booklet, one can direct individual infantry units. Sometimes this works. However, more often than not, when one finally gets a soldier's attention, he wanders off. It is best to set them just outside the moat on the side facing the attack and leave them be. If placed in the moat or between the moat and the wall, they just stand there and watch as months of work crumbles into heaps.



Raising the Curtain Walls

Since the walls are more of a liability in the game than an asset, make them easy to build and rebuild. (As if the game were not slow enough anyway, the walls will periodically collapse.) Make the walls and towers as short and thin as the game allows. Build only square towers.

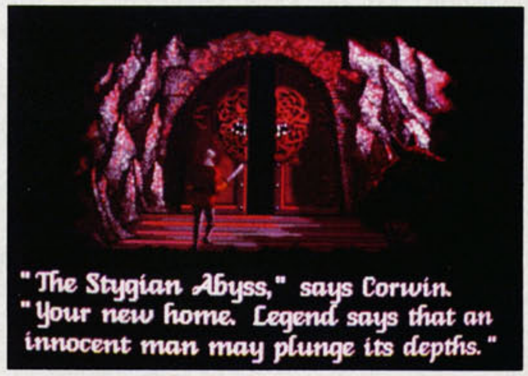
Make sure that each wall and tower is "Completed." Some that appear complete in the picture are really missing five or six bricks. The castle isn't complete until *every* unit is complete.

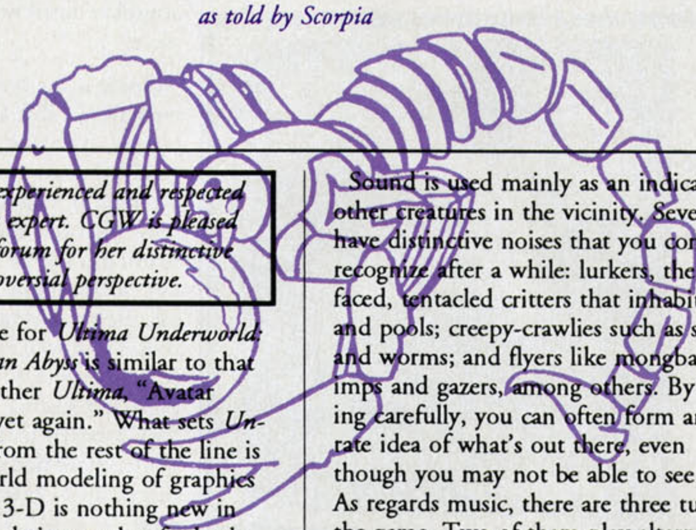
Castles is the best (only) game we have on this fascinating bit of history. Someday we may have a game wherein we can emulate Vauban in meaningful castle design, then test the design by defending it in the historical manner, with mobile troops, boiling oil, the occasional sally, countermines and wall repair, or lay a real siege with towers, ballistae, rams and scaling ladders. We'll look forward to *Castles 2*. Meanwhile, these tips should speed things up in **Interplay's** *Castles*. **CGW**

Scorpion's View

Origin's Ultima Underworld: The Stygian Abyss

as told by Scorpia





Scorpia is an experienced and respected adventure game expert. CGW is pleased to provide this forum for her distinctive and often controversial perspective.

The plotline for *Ultima Underworld: The Stygian Abyss* is similar to that of every other *Ultima*, "Avatar saves Britannia yet again." What sets *Underworld* apart from the rest of the line is the 3-D real-world modeling of graphics and movement. 3-D is nothing new in dungeons; it was being used as far back as Lord British's first published game, *Akalabeth*, more than ten years ago. Since then, a number of companies, especially FTL with *Dungeon Master* and SSI with *Eye Of The Beholder*, have greatly refined the point-of-view approach. Now comes *Ultima Underworld*, and 3-D takes on a whole new meaning. The key to this breakthrough is the use of full-range movement. In a typical point-of-view game, if you turn left, your perspective shifts by ninety degrees. There is no in between; you always do a quarter-circle turn. In *Underworld*, a turn goes through a full 360 degrees, and you can stop it at any point around the circle. Further, walking or running in the dungeon is not always on the usual straight line, nor is it of the "click-step, click-step" variety. Motion is smooth and continuous, and you can shift position as you move, including making a complete turn.

The use of light and shadow adds another dimension of realism. Dungeons are dark places, and torchlight doesn't go very far. In addition, the illumination varies according to the surroundings. When traveling through an area that has light-colored walls and low ceilings, you see better than when moving through open spaces, such as the swamp, using the same type of light source.

Sound is used mainly as an indicator of other creatures in the vicinity. Several have distinctive noises that you come to recognize after a while: lurkers, the frog-faced, tentacled critters that inhabit rivers and pools; creepy-crawlies such as slugs and worms; and flyers like mongbats, imps and gazers, among others. By listening carefully, you can often form an accurate idea of what's out there, even though you may not be able to see it yet. As regards music, there are three tunes in the game. Two of them play alternately, one segueing into the other, as you move around. These can be described as "bright march" and "spooky/eerie." The third tune, a bit frenetic, comes on only in combat mode. The music, however, is rather loud, and sometimes obscures the sounds of dungeon denizens. It is generally better to have the music off to avoid unpleasant surprises when exploring new locations and to turn it back on when traveling through known areas.

Auto-mapping is the best I've seen to date. Each level of the Abyss has its own page, filled in as you explore the level. Along the right-hand side is an ample margin where you can write notes, using a nice-looking quill pen. In fact, you can write anywhere on the map itself. The preferred method is to number important locations and use the margins for the actual notes. When looking at the map, you can scroll up or down levels, too. There are blank pages beyond eight (the number of levels in the game) that you can use for additional notes. There's even an eraser in case you make a mistake or two. The only feature lacking in this otherwise excellent mapping facility is the ability to run off a copy on your printer. While you can look at the map at any time, there are moments when having a hard copy would make life a little easier.

So, what is the Avatar doing in this hell-hole, anyway? First of all, it wasn't always a dungeon. Sir Cabirus, a knight of the Crux Ansata (a paladin organization), brought various groups to the Abyss and turned it into the showplace of Britannia. It was meant as an example of peaceful co-existence, since the groups included such non-humans as Goblins, Dwarves, Lizardmen and Trolls. Everything went along fairly well, until Cabirus died and a few volcanic tremors shook the establishment. (Apparently the knight never considered the possible dangers of living inside a volcano.) These days, the survivors struggle to live on as best they can, and the Abyss has become a dumping ground for anyone the local baron doesn't care for. A trip into the Abyss is generally a one-way trip.

The Avatar has been dumped into the dungeon to find the baron's kidnapped daughter. The reason for this is explained in a lengthy introduction, complete with digitized voices. Unfortunately, this is the *only* place in the game where voices are used, which is a big disappointment. While the digitization is very good, it's hardly worth chewing up two meg of disk space merely for the lead-in. Far better to have used voices throughout the game, particularly in the dream sequences and other special circumstances.

Character generation is reminiscent of *Ultima IV*, the major difference being that you can raise skills, instead of attributes, during the course of the game. There are three sets of skills in the game: one for combat, one for magic and one for general. Different classes are given different choices for starting skills, but after play begins, it is possible to raise any skill. This is done by locating a shrine, chanting the appropriate mantra and hav-

Ultima Underworld Tips

Problems with vanishing inventory items have been reported in the game. What usually happens is that the original items in a container disappear and are replaced by something else. This happened to me one time when I opened a bag and found inside only two worn hand axes (something I hadn't even picked up anywhere at all!), instead of the objects I was expecting to see. To avoid these problems, make sure that no container of any kind ever holds more than seven objects at once. After I kept mine down to seven items or less, nothing ever disappeared on me again.

This brings us to inventory management in general. Not counting space for armor and weapons, you have only eight slots for carrying things around. That isn't much, so you must use the various bags, pouches, boxes and packs that you find to increase your carrying capacity. Even with that, you don't want to be carrying around too much, since you do have a weight limit (measured in stones). This becomes important as you find better armor, as armor and weapons naturally count toward the limit, and chain and plate is pretty heavy stuff. What most people do is set up caches of extra items in various safe locations (noting them on the map, of course!). Objects in this game do not disappear when left on the ground; they stay where they are. So you can set up equipment dumps throughout the Abyss, leaving items behind when inventory space or weight gets to be too much.

When you create your character, strength is the most important statistic. Strength determines how much you can carry and determines the starting values of your combat skills. The higher your strength, the better these values will be, and combat is very important in this game. I ran two characters through the Abyss, a Druid and a Shepherd, with starting attributes respectively of 23/17/20 and 23/13/20 (for ST/DX/INT). These values proved quite satisfactory. Regarding class, I recommend that you choose one of the three that are able to do some magic right off: Druid, Shepherd or Mage. Runes are not difficult to find on the first level, and once you have them (and the rune bag), you can cast both light and food spells. This means you don't have to clutter up your inventory carrying light sources or food supplies most of the time. The other classes begin without spellcasting ability, and until at least one visit to a shrine (with enough experience), they cannot do any magic.

As an offensive weapon, magic isn't all that useful. Most offensive spells (such as lightning bolts and fireballs) are missiles and require a lot of space between you and the target. This room is often hard to come by. Opponents who have no long-distance weapons (spells or slings) will always try to close with you, so you have to keep backing up to get your spells off. If they do have ranged weapons, you end up in a long-distance duel, which is not the best way to fight. This applies also to distance weapons, such as slings and bows. They suffer from the same problems as spells, plus you have to find ammunition for them (slingstones or arrows), making them of limited use at best. After a while, I dumped ranged weapons entirely, preferring to carry an extra hand weapon as a backup instead.

Fortunately, your opponents are bound by the same rules you are (and a gold star to Origin for that one). They, too, need room to get off their distance weapons. Therefore, the best tactic when up against goblins (who use slings), gazers (who use magic) and fire elementals (who throw fireballs), is generally to rush right in, get close and stay close, swinging away all the time. When fighting elementals, it is also a good idea to have Sanct Flam up to provide some extra protection (especially if there's more than one of those critters around). Against opponents who have no distance weapons, the usual tactic is to swing as you go forward; back up quickly, readying another blow; then dash forward again. Of course, since they are also moving quickly, you can't always expect to fight on such a straight-line basis. However, backing up will give you a better view and some room to maneuver, and possibly cause your opponent to miss you.

When facing multiple opponents at once, constant movement is a life-saver. Don't stay in one place; smack an enemy, move to another and keep going. By staying in motion, you make it harder for the critters to get a bead on you, especially if they have distance weapons. However, if you're up against a mixed bag of opponents, go for the most dangerous first and take it out as quickly as possible. Remember you can run away if things are getting too tough (and there's an exit handy). Most critters will follow you only so far, then give up the chase. This gives you a chance to rest, lick your wound, and try again later. During the game, you will be running a lot of errands for a lot of people. There is always a quid pro quo; no one gives away something for nothing. Take careful notes on who wants what, so you don't forget anything. When talking to various NPCs, keep in mind that you're the Avatar. Being polite, honest and humble will get you further than being rude, arrogant and mendacious. A little flattery is also helpful, on occasion. You have to keep your karma clean. That means not attacking anything that isn't outrightly hostile. If it isn't bothering you, leave it alone. As mentioned before, there are slugs, worms, rats, bats and other critters who are just going along, minding their own business. There is no need to kill these things.

Level seven is likely to be the most difficult one, since magic will not work there for some time (your mana flask drains right out as soon as you set foot on that level). Bring a light source with you, and a couple of poison antidotes. Cast a light spell (preferably Daylight) just before you go down the stairs to seven. Be prepared to do a fair amount of jumping around here, too. Make sure you stay away from any guard posts until you have the amulet. Most doors outside of the massive variety can be bashed open if you don't have the appropriate key, Lockpicking skill or Open spell. Weapons can be used for this, but chopping up doors is very likely to ruin them (except for the Sword of Justice, which never loses its edge). If you must bash open a door and don't have that sword, use your bare hand. It's a slow process, but will get the job done and preserve your weapons. Above all, take your time going through the Abyss. It's a huge place, with much to discover. You'll do better by exploring carefully, taking good notes, and saving often than by trying to rush through it. Good luck!

ing enough experience for an advancement. There are two types of mantras, set-specific and skill-specific. A set-specific mantra raises skills randomly. For example, Summ Ra, the Combat mantra, will raise three combat skills, usually by 1-3 points each. It pays to try out a shrine now and then to see if you're ready for another boost.

Magic is accomplished through the use of runes. By putting together different combinations of rune stones (as noted in the manual), and expending the necessary amount of mana, spells are cast. Half your level, rounded up, must be equal to, or greater than, the level of the spell you're attempting, or it won't work. You begin with no runes; they must be found as you make your way through the dungeon. In fact, you begin with very little: no armor, a worn dagger and a few supplies. Everything else must be scavenged or traded for as you make your way down the levels.

This brings us to the point that not everyone or everything you come across will be hostile. The enclaves set up by Cabirus still exist, although not in their former glory. Any beings, even be they ghouls or trolls, who live under the banner of the Crux Ansata (the ankh), are inclined to be friendly. It is in these places that you pick up important information, as well as some important items. Outside such locations, most of what you come across is likely to want your blood. Yet not *all* critters will be hostile to you. If something doesn't come charging your way immediately, take a moment to look at it. Any description other than "hostile" means that it will leave you alone, so long as you leave *it* alone.

Still, there is a fair amount of combat in the game, and most will find it a new, possibly frustrating, experience. Anyone who had problems with the "slip'n'slide" techniques of *Eye of the Beholder* is likely to have even more trouble in *Underworld*. In combat, the right mouse button controls your weapon. Holding down the button draws back the weapon; releasing the button releases the blow. The type of blow (overhead bash, slash or thrust) depends on the location of the arrow cursor when the button is first held down. However, the mouse (via the left button) also controls your own movement. Which way you move and how fast is, again, determined by the position of the arrow cursor on the screen. So you use the mouse to fight and move at the same time. What causes the difficulties is that your opponent is *not* standing still. Unlike virtually all other games, the enemy doesn't stay toe-to-toe with you. He (or it) is moving: back, forward, around the side, etc., and striking at you all the time. So you have to keep moving, too.

Trying to control both movement and weapon with one input device in the heat of battle is not easy. You *can* use the keyboard for movement, but then you have two hands (and eight keys!) to worry about. It's all too easy to hit the wrong movement key and find yourself in trouble, especially later in the game when you face multiple opponents.

The Abyss is a large place and, in some ways, can be thought of as a sort of vertical *Martian Dreams*: the game is not linear; there is much running back and forth, up and down, between levels. Unfortunately, you will have to do it all pretty much on foot. No easy method of traveling long distances exists outside of the single moonstone. You can teleport to the moonstone from anywhere with a Gate Travel spell or scroll, but the trip is one-way. The one good aspect to this is that once an area of the dungeon has been cleared out, it stays that way. You don't have to worry about endless battles with regenerating critters as you trek around the Abyss. They're gone forever, so you can, at least, go quickly through the passages on your various errands.

Skills are a nice idea, but not particularly well-considered or implemented. For instance, Lockpicking was useless; almost any locked door short of "massive" could be bashed open eventually, even if you had no key, not to mention the Unlock spell. Appraise, supposed to be used in trading, had no meaning at all. What did it matter if you swapped a couple of spare weapons and a gem, if it got you a chainmail shirt? Search was laughable, since most secret doors show up on the map after you pass by their locations. Other skills were equally of little value.

For all that, *Ultima Underworld* is an impressive first product. The meticulous construction of a real-world dungeon environment is outstanding. Despite a few silly puzzles, the body of the game is substantial, with much to do and to explore. Combat, while difficult to master, is generally well-balanced. *Ultima Underworld* may be a dungeon trek, but it is certainly the dungeon trek of the future. CGW

 Circle Reader Service #101



Art by Rodger MacGowan; © 1992 RBM Graphics

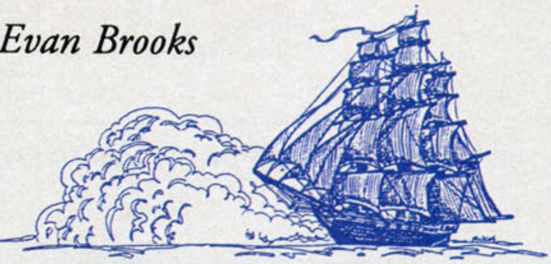
COMPUTER WARGAMING WORLD

Computer Wargaming World is published twelve times a year as a free supplement in ***Computer Gaming World.***

II Samuel 22:35

Broadsides & Gripeshot

by M. Evan Brooks



This month, CGW's contributing editor on wargames and simulations offers his "gripes from the foxhole" and stakes his claim on being labeled a grognard..

Stupid AI Tricks: Alan Emrich, who usually writes the material for this column, is a fan of modem-capable games. I welcome his fervor, but I cannot be overly sanguine as to its success. There are other types of players. I am a product of the board wargaming hobby. The main reason I entered the computer market was due to a lack of human opponents. Not that I lacked such opponents, it is just that they could not fit in with my available time. As I began a family, I found my marathon War in the East 9-man week-end playing frenzies could not be maintained. Also, I learned that my wife had little interest in determining the appropriate combined arms tactics of the Grand Armee at Waterloo. Hence, the computer was the answer.

Many people complain about the poor AI of the computer opponent and note that nothing can beat a human opponent. Well, even with a modem, I find it inconvenient to set up a definite time for a period of play. With an AI, I can fit in a few minutes whenever I choose. Also, I play for entertainment and learning. It usually takes a few playings to determine the computer's failings; hopefully, by that time, a new release has garnered my interest. When I return to the "oldie", it will have regained its initial charm, because I no longer remember how to "beat" the system. Remember, a computer never gets a headache or quits in mid-stream and you can rest your beer on the top of the monitor (not a recommended action, by the way).

The more things change: Why do computer game companies run in cyclical patterns? Wargame releases are rare enough without having to endure umpteen releases on a certain subject and then, have it remain untouched for the next few years. Currently, carrier battles of World War II seem to be the rage. SSG's Carriers at War will compete with SSI's Carrier Strike and both will compete with RAW's Fleet Commander, all to be released in 1992. This is not, however, an isolated incident: World War II Pacific strategy games are also en route. SSI's opus from the prolific Gary Grigsby, Three-Sixty's Victory at Sea from Jim Dunnigan and Koei's Admiral's War (formerly called PTO).

Nor is this parallel development strictly a recent event: Spectrum Holobyte's Tank, Microprose's M1 Tank Platoon, EA's M1 Abrams, and Accolade's Steel Thunder were all released within scant months of one another. Even more intriguing was the almost simultaneous release of Three Sixty's Blue Max, Microprose's Knights of the Skies and Dynamix's Red Baron. Do great minds think alike? And what of the glosses-over periods. Lately, I have returned to my Atari 800, just to play Broadsides. Is there ever going to be a graphically-oriented Napoleonic naval simulation for the current machines?

Looking Over the Other Guys's Shoulder: Similar to the cyclical nature of releases, there is an interesting phenomena of computer game companies knowing the subject matter of their competition's releases, but knowing little of the game itself. Knowing how many companies produce similar titles to that of their competition, one would think that a designated employee has been tasked to carefully examine the competition, review its features (both good and bad) and then, report back. Instead, most companies seem to have a general idea of their competitor's products, but no in-depth analysis. Why? So they can make the same mistakes?

Windows: The operating environment of the future (according to the Gospel by Gates). But a Windows-environment is suitable for multi-tasking. How many times are you in the middle of a flight simulator, setting up a bombing run, and suddenly say, "Gee, I better switch to my word processor and send out a thank you letter to Aunt Jane for the gift". All the time, right? What possible reason is there for games in windows other than to cash in on the current yuppie flavor-of-the-month?

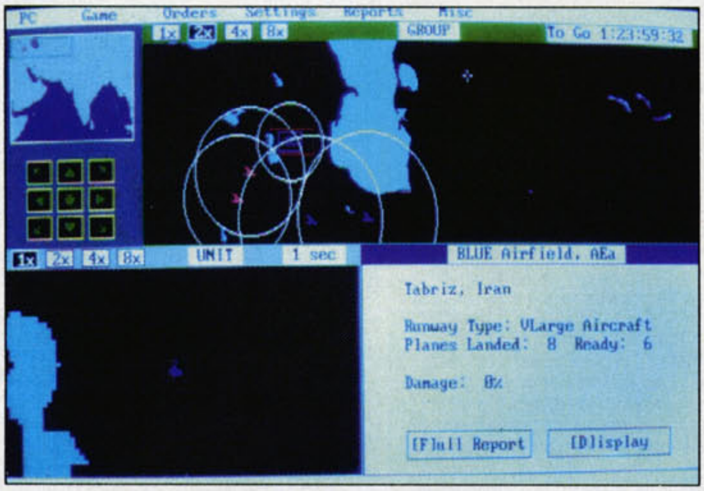
User Friendliness: Why do some games ask you for the configuration of your machine every time you boot up? Can't they create a file to retain such information? Why go through the joystick corner chasing routine every time? And finally, why do certain games force you to reboot upon completion? I mean, you decide your "civilization" is going nowhere fast, and quit. Why not have an option to return to the game as opposed to DOS?

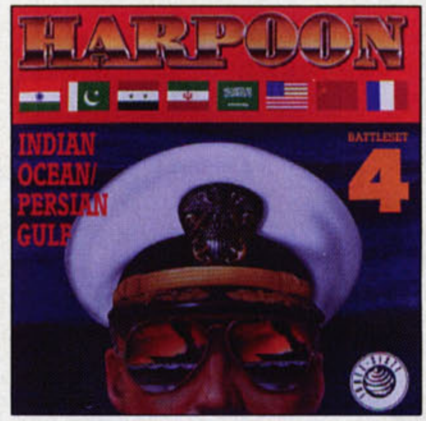
Protection Schemes: And finally, it never goes away. Yes, it can be frustrating to look up the documentation when a game is new. But try to pull out the game a year or two later. Where is that documentation? What happened to the "Spinning Wheel"? There are certain games that I no longer play simply because I don't feel like rummaging through the documentation pile. CGW

The Reign in Bahrain Depends Mainly on the Planes

Harpoon Battleset #4: Indian Ocean/The Persian Gulf

by Tim Carter





TITLE:	Harpoon Battleset Four: The Indian Ocean/Persian Gulf
SYSTEM:	Amiga, IBM and Macintosh
PRICE:	$34.95
DESIGNER:	Tim Jacobs and Darrel Dearing
PUBLISHER:	Three-Sixty Pacific Campbell, CA

The fourth *Harpoon* battleset covers conflict in the Persian Gulf and the Indian Ocean. As with each of the previous battlesets, this means that players are provided with a new map, new situations and a variety of new platforms. The combination of the Gulf War, the Iran-Iraq war and the various tensions within the Indian Ocean area provides the potential for an interesting and diverse set of scenarios. The addition of new platforms, some of which have not actually been deployed yet, adds to this potential and opens the door to a myriad of "what if" situations.

Get with the (World) Picture

However, the battleset as a whole does not quite live up to this potential. The main problem is the selection of scenarios, which lacks the creativity of the earlier battlesets. While the Persian Gulf scenarios were adequate, once the Indian Ocean becomes the scene of action, the selections available are a letdown.

Many scenarios involve Third World War-type situations between the Soviets and the United States and its allies. Such scenarios are both out of date and unnecessary, given the possibilities for conflict that actually exist in the region. (It seems amazing that no India-Pakistan war is considered, given that this is one of the most volatile relationships in the world today.) The battleset seems especially weak when compared with *Battleset Three*, which provided legitimate alternatives that were both topical and interesting to play.

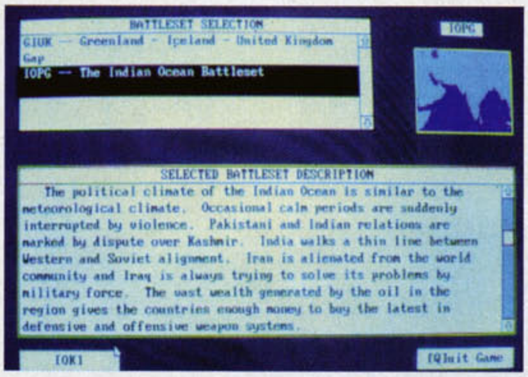
What's New?

Despite the lack of imaginative scenarios, however, the battleset still includes much that is new and different to attract *Harpoon* aficionados. Regional forces, notably the formidable Indian navy, have been included, as well as a wide range of more familiar NATO and Soviet platforms. Along with the old, however, comes the new. Perhaps most interesting is the inclusion of the Soviet *Varyag* class carrier. Equipped with MiG-29s and Su-27s, this unit is second only to U.S. carriers in terms of striking power.

By virtue of new aircraft and new carriers, the power projection capabilities of France, Great Britain and India are also improved. V/STOL aircraft such as the Harrier II and Yak-141 provide even small ASW carriers with viable air-to-air defenses, while the *Cochin* class carrier puts India in almost the same class as the Soviet Union in terms of naval air power.

"Fast Draw" Strategy

The key to victory in most situations in *Harpoon* is getting in the first accurate shot. Success depends on both the quality of sensors and the range of the available weapons systems. In developing strategy for *Harpoon* in general, and the Indian Ocean/Persian Gulf battleset in particular, the comparative range of offensive and defensive weapons is the key variable.



Dodging Torpedoes

Players should recognize that diesel submarines present a different type of threat to surface forces than their nuclear-powered counterparts. In many cases, diesel subs are easier to avoid than they are to kill. For under-equipped surface forces, a close-in encounter with these units will be deadly.

When conducting an ASW campaign, use available air assets to patrol in front of threatened surface units. Keep surface units moving at high speeds, 19 knots if relying on ship-based sonar, maximum speed if sufficient aircraft are available to cover the path of the task force. By maintaining a high speed, players avoid having to cover the flank and rear of the task force, as subs will not be able to maneuver into these areas. In fact, faced with a task force moving more than 15-17 knots, diesel subs will not be able to maneuver much at all. Instead, they will have to rely on luck and hope that a hostile force sails, literally, over them.

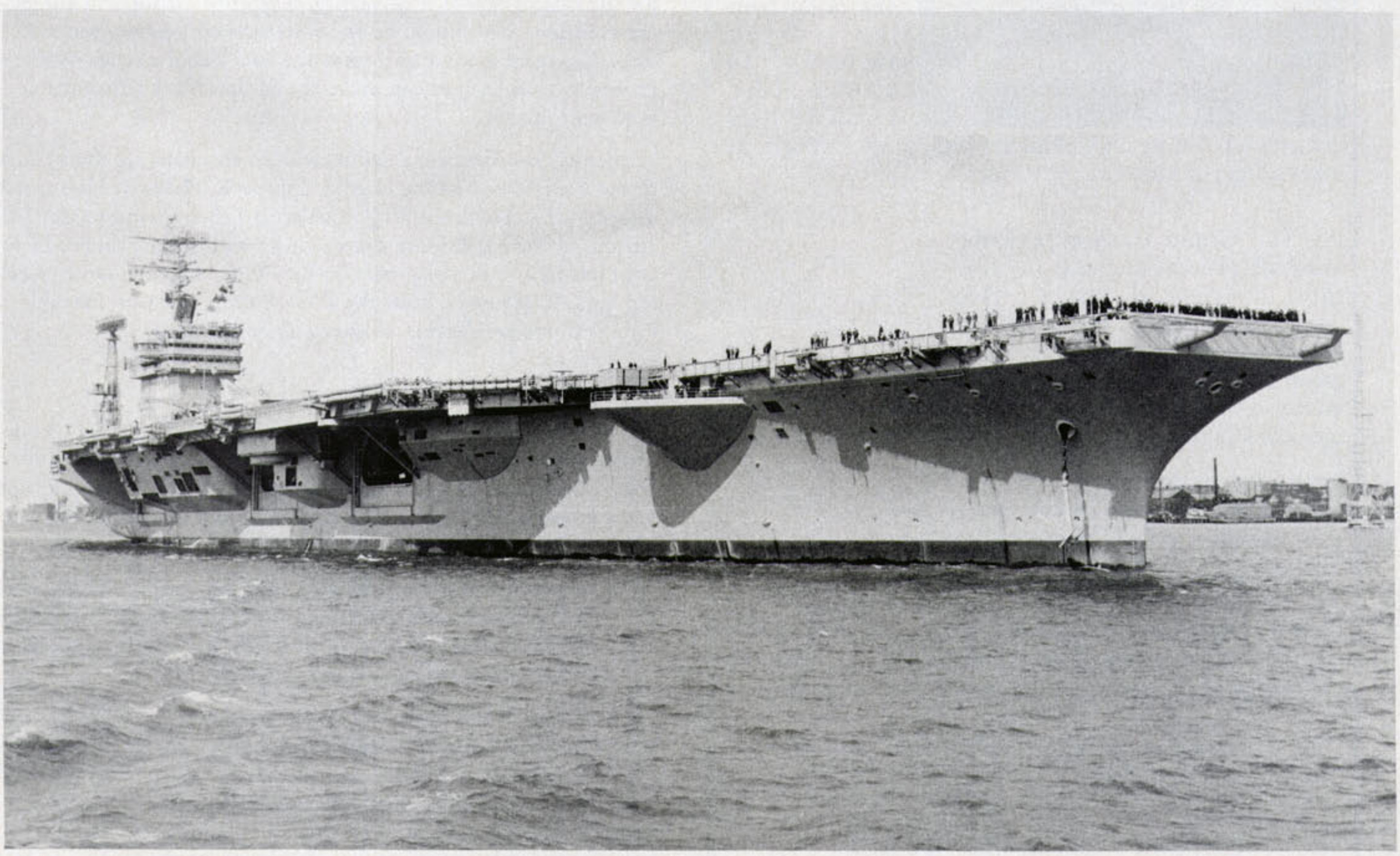
It is also a good idea to introduce a few turns or zig-zags into the initially plotted courses of important task forces, since enemy submarines will often be lying in wait along the original path.

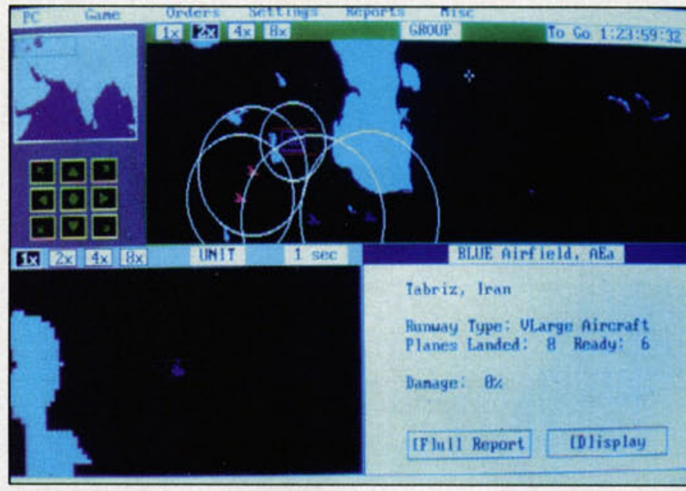
Needless to say, if one is in command of diesel subs, they should be positioned in narrow straits or other areas where there is a high probability of interception. Keep in mind that the paths of computer forces are pre-programmed and are often predictable. They usually move in straight lines, sometimes for a considerable period of time. Success will generally depend on first getting to the point of interception and then letting the enemy come to one's own fleet.

Strategy in the Air

When conducting air combat, again the key feature is the range of weapons systems. The F-14 is easily the most important platform available by virtue of its long-range Phoenix missiles. These aircraft can be effective in an offensive standoff air-to-air role with virtually no risk to themselves. Of course, most of the scenarios included in the battleset that involve U.S. carrier groups are pretty simple to play in the first place. So players will have to make a major mistake in order to get into trouble anyway.

The same cannot be said for air and carrier operations involving





the other nations in the battleset. When opposing a U.S. carrier group, the best strategy is one of attrition. Due to the abysmal handling of air assets by the computer, it is often possible to shoot down the AWACS aircraft and thus deprive the carrier of its greatest advantage over its smaller counterparts. Once the carrier group loses its airborne early warning capability, the surface units can be targeted with a series of standoff attacks that pick off the pickets one at a time until the heart of the task force is vulnerable. Patience is a virtue here.

When operating a task force that includes one of the smaller aircraft carriers, patrol aggressively whenever possible to make up for the lack of AWACS capability. If land-based support aircraft are available, they should be coordinated with carrier groups as well. The combination of long-range land-based aircraft with improved aircraft carriers can make the Indian Navy a formidable opponent indeed.

Air-to-air missiles can often be avoided by changing the altitude of the target group as the missiles approach. Flying at high speed directly away from incoming missiles and then diving to very low altitude at the last minute can seriously reduce the number of aircraft lost in an otherwise even battle. When attacking with Western aircraft, remember that the F/A-18 can fly at very low altitude without ever having to worry about crashing.

Assessment

In contemporary international politics, power projection is one of the most important issues in the Indian Ocean/Persian Gulf area. The United States, France and India are all pursuing serious naval power projection capabilities that could be involved in a war in this area in the future.

It is rumored that India is looking into purchasing the half-completed hull of the second *Varyag* class carrier from the Russian Republic. Including one of these units in the Indian Navy can lead to a number of interesting scenario possibilities.

Despite the lack of creativity in the generation of scenarios, *Battleset Four: The Indian Ocean/Persian Gulf* is a useful addition to the *Harpoon* system. Players who use the *Scenario Editor* will find that the new platforms make the package worth the price. The small carriers alone allow for dozens of situations that simply were not possible in the previous battlesets. **CGW**

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Board Wargame

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Best WW2
Board Wargame

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Board Wargame

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(To a Game Designer, Developer, Graphic Artist or a specific Game for outstanding achievement in Playability in 1991)

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Explore the History of Computer Games

Early CGW back issues are the THE RESOURCE for the early history of computer games and the computer game industry. These issues are in short supply. Follow the sage old rule in regards to hard-to-find books: when you find 'em, buy 'em; chances are they won't be there later. Prices are based on availability.

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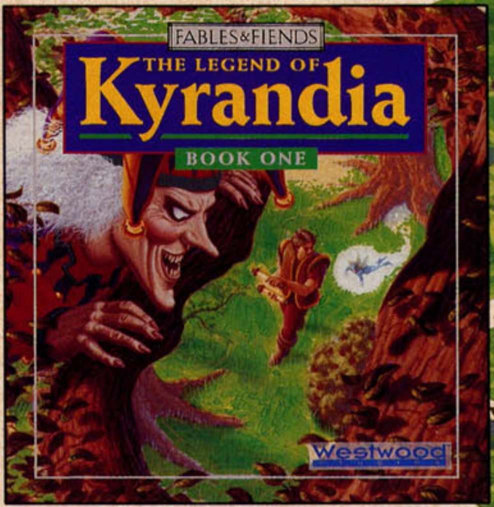


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THE LEGEND OF KYRANDIA AWAITS YOU!

When Reality Impacts Simulation

A Naval Officer Details His Design Pilgrimage

by Commander Alan Zimm



Commander Alan Zimm is the designer of Action Stations!, *a tremendously accurate and realistic command simulation of World War II naval combat, extremely well-rated by our readers in spite of its lack of graphic chrome. In this article, Alan shares the life experiences and design considerations that led to the development of* Action Stations! *as well as his upcoming* Fleet Commander. *This issue, we present Part I of Cmdr. Zimm's diary as he describes the development of* Action Stations! *and presents his initial ideas for* Fleet Commander.

June 1985: USS *Vinson* (CVN-70), Off the Coast of Iran

We've been underway now for over 90 days without a pit stop, waiting for the Ayatollah's psychiatrist to sign the commitment papers. Even with the typical 104-hour work week under way, trying to keep two nuclear reactors fit, ready and safe, there's time to study. The topic of the moment of the Wardroom Bull Session is torpedo evasion: what's the best tactic to evade a straight runner? We have four votes for "turn into," five votes for "turn away" and one (aviator) that wants to put the engines emergency astern. Somehow I discover that I've volunteered to write a "simple" computer program that will track ships and torpedoes so we can experiment. Well, that shouldn't take too long....

November 1985: Pier-Side, Alameda, California

Well, the torpedo tracking program is built, and works great. A side benefit is that you can put in the locations, courses and speeds of ships from WWII battles and get chart positions at any point in the action. With this, you get a much better feel for the ebb and flow of battle than a static chart in a history book.

One result is that I'm learning that many history books have a major problem: they are written by historians! Historians just don't understand the technical side of the trade or appreciate the overwhelming impact of naval equipment, training and doctrine on combat decisions. Ask a historian why the British beat the German pocket battleship *Graf Spee* and you'll get a discussion of British naval tradition, but nothing on gunnery fire control, relative rates of fire or the relative merits of the 11" versus the 6" gun. Now wouldn't it be interesting to put in the technicalities of gunnery and damage control into the program and *really* explore alternatives in a naval battle?

April 1986: Washington, D.C.

My first shore duty in too many years. I'm getting interested in the naval program again. Several years ago, I had worked on the problems of simulating naval gunfire control, ballistics and damage control while at the Naval Postgraduate School. I managed a good deal of research, with the Naval Weapons Station at Dahlgren, Naval War College, National Archives and British War Museum contributing to the project. Greenwich has been very cooperative through the mails, but thank goodness that I've had direct access to the Washington Navy Yard Operational Archives. There are a few computer models on modern ship damage that I've seen that have given me some good ideas on how to handle damage assessment.

The biggest challenge will be to go from data to model. Most of the information is very technical in nature, and not easily interpreted — I can see now why historians have so much trouble coming up with correct conclusions, considering that they don't have the background to interpret a ballistics chart corrected for gun barrel wear, and don't understand what a fire control system considers when it decides to call for maximum or reduced rate of fire.

I could build a simple, large-scale model, but I believe it will be necessary to go with an exceptionally detailed, shot-by-shot, hit-by-hit construction. Why so detailed? After all, land warfare simulations hardly track every artillery shell. The problem is that naval warfare is vastly different from land warfare. This can be demonstrated using a statistical concept called "The Law of Large Numbers." In dealing with a system of probabilistic occurrences (such as firing a weapon, with a certain probability of hitting the target), this law states that as the number of trials (shots) goes up, the chances that you will see an overall "average" performance increases. A simple example: flip a coin 10 times, and you could possibly see 10% "heads" and 90% "tails." Flip the coin 10,000 times, and the chances of seeing 10% "heads" approaches zero. With lots of "shots," the overall result is very close to the expected performance, and the chances of significant variance from the expected performance approach nonexistence.

In land warfare you may have thousands of men exchanging millions of shots, with hundreds of hits. The "Law of Large Numbers" allows us to approximate the performance of the entire unit as an aggregate, and even assign a single value as a measure of combat power — the famous "Attack Factor" and "Defense Factor." On the sea, t'ain't so. The efforts of an entire task force might culminate in getting a squadron of dive bombers over the target. You have just a few shots to get your hits, the difference between victory and defeat. If the individual probability of hit is in the 20% range, then you *expect* to get two or three hits, but you might end up with just an

aesthetically pleasing pattern of lovely, harmless columns of water.

Another fundamental difference is the relative fragility of the units. Put only one or two bombs on a carrier's flight deck and you now have a 35,000-ton portable radio. Put five torpedoes into a capital ship and you are three years, one shipyard and a whole lot of the National Treasure away from a replacement.

Conclusions? First, in naval warfare you can expect the range of combat results to vary greatly. Second, the combat results are much more sensitive to *details*. Individual actions can make the difference of only one hit, which could be the margin for victory. Actual examples abound: the Damage Control Officer on the *Taiho*, who made a mistake in ventilating damaged gasoline tanks, and blew up his ship; the two American SBD pilots on a search mission who surprised a Japanese carrier and single-handedly destroyed its flight deck; the British torpedo bomber pilot who jammed the rudder on the "unsinkable" *Bismarck*, which directly led to its demise.

From the viewpoint of a wargamer, this is incredibly exciting. The player's decisions can make a big difference in the results. For the game designer, it makes things really difficult: how do you get all the vital detail into a wargame without overwhelming the player? Right now, there are some significant problems. Firing rates and hit rates are one. This involves the very delicate balance between destroyers and battleships — allow the gun ships too many hits at too long a range, and destroyers never get into torpedo firing range; underestimate, and the destroyer becomes more valuable than cruisers and battleships!

The real lessons emerging from this simulation effort is the interrelationship between technology and the tactical decisions of the commander. Gun fire control systems work best when the ship is on a steady course and a steady speed, but that also makes the ship very vulnerable to enemy torpedoes. Change course and speed to duck the torpedoes, and your gunnery accuracy dips to nothing. Naval commanders constantly had to assess the chances of hitting versus the risk of being hit, based on tactical decisions and their knowledge of the performance of their weapons systems. Capturing this in the game will be a major challenge.

October 1986: Washington, D.C.

I have all the major elements of the simulation in algorithm form now. The approach has been to build each system independently, and in detail. If everything is right, they should all mesh to give accurate combat results. Beginning to do the coding now. I'd like to keep the program under 64K. I told my wife that it should be finished in three months or so.

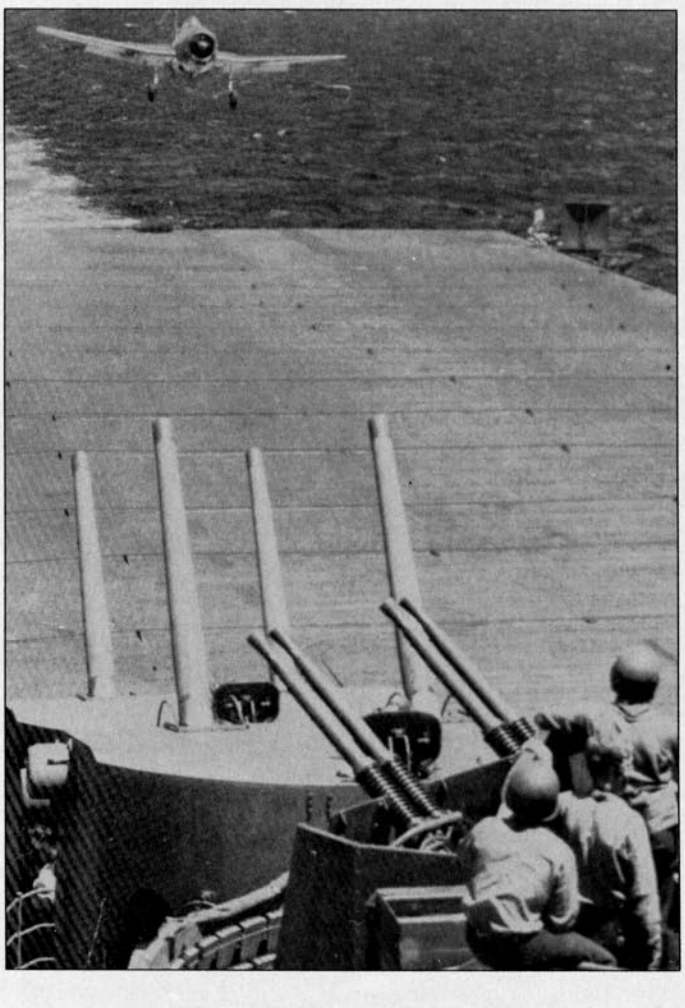
January 1987: Washington, D.C.

Well, the code is up to 154K and still growing. I estimate I'm less than 50% done! More problems keep popping up: for example, what's the candlepower of a starshell? How much area does it illuminate? How long does it burn? How often did the ship renew the illumination? Overestimate starshell performance and you have the equivalent of a day battle; underestimate it and ships tend to close to murderously short range, affecting the balance between torpedoes and guns.

March 1987: Washington, D.C.

My current assignment is at the Center for Naval Analyses, working as a strategic analyst. After hours, I've been doing research on Soviet military theory and command methods. The Soviets have a unique approach to making decisions: they have predetermined the "correct" response to the universe of combat situations. The commander determines not *what* to do, but rather what *situation* he is in. The relevant information is then fed into a computer, which specifies the optimum course of action. Some of the combat theory that goes into these algorithms is very advanced.

I can't experiment with these concepts using modern systems because of security clearance problems — I wouldn't be able to transport the disks! However, I have the World War II program (still under development!); I'll build a "computer opponent" using basic combat theory and work in that environment.



April 1987: Washington, D.C.

The main program is up and running! It's just super. I plugged in all the variables for the *Hood* versus *Bismarck*, with glorious results: first sighting distance dead on, open fire range dead on, first hit within 120 yards of actual first hit, ammunition expenditure within 4%, hit rate within 10%, shell angle of fall right on, everything just lovely. I ran several more trials, including the damage subroutines and a randomness generator, with similarly good results. One of the more amusing differences was that the Auto Warrior initially assigned *Prince of Wales* to target the *Prinz Eugen* — and then the *Eugen* took a plunging round into her magazine and blew up! CGW

To be continued

Wargaming's Tiny Titan

Big Three Keeps WWII Simple

by Alan Emrich



Title:	Big Three
System:	IBM
Protection:	None
Price:	$29.95

The average reader of this magazine probably eschews the vast majority of "shareware" and self-published games because of their, ahem, *uneven* quality. Wargamers, though, as devotees of historical subjects over game quality (as their gaming libraries invariably reveal) , are more inclined to dig a little deeper in search of a "diamond in the rough" that might cover their favorite historical time period at an agreeable scale and complexity level. Just such a find is *Big Three*, self - published by Steven D. Jones of the aptly named **SDJ Enterprises, Inc.** Named after the Allied leaders (Churchill, Stalin and Roosevelt) in Europe during World War II, *Big Three* is a big game in a small package.

WWII in a Nutshell

For the boardgamers among our readership, *Big Three* can be thought of as "*Hitler's War* meets *Third Reich* a la *Axis & Allies.*" For the rest of us, it can be seen as "*Storm Across Europe* made simple." In any event, *Big Three* is a very strategic - level wargame focusing on Europe from 1939 to 1945. With units representing whole armies, fleets and air forces (generically numbered, unfortunately) and a game design philosophy stressing simplicity, this "big, dumb" little game manages quite easily to pack a lot of play value.

The game is played over a map that uses large squares laid out in a hexagonal "brick" pattern to regulate movement. The terrain scale is vast, with Denmark, the Netherlands and Switzerland each represented by a single "hex" and the distance from London to Paris being a mere three hexes. Key terrain hexes include capitals, factories (both of these have an economic value) and ports (which are the only places for ships to dock and for invasions to be conducted). Mountain, clear and sea hexes round out the terrain types, and the one - to - two hex- frontages of the North African and Italian fronts actually plays fairly well in practice. Unfortunately, map scrolling requires disk reading and is therefore slow to a near- maddening point.

Economic Perspective

Game turns are psuedo-seasonal, with three turns per year. Each year, players receive "Military Points" (MPs) based on the number of factories and capitols owned at the start of the year. Like "Basic Resource Points" (BRPs) in *Third Reich*, they are spent to build units, conduct offensives (per *front*, again like *Third Reich*) or declare war on *major* powers. Unit costs range from one for frontal offensives, "beachhead" conversion of captured ports and infantry armies up to five for fleets. Eliminated units are placed in a "force pool" along with any reinforcements available for purchase.

Strategic bombers are available for both sides (and the Axis player may construct a U-boat unit). These make "economic attacks" on the other player's MPs in the bank, even to the point of giving an opponent a negative treasury. Interestingly, the hexes that compose the United States box are directly connected to the main European map. Moving between them has no extra movement cost, so ships and bombers can cross the Atlantic with realitive ease.

Warring Nations

Each turn, players maneuver and engage their forces in combat, one front at a time (using the classic *Third Reich* front boundaries of western, eastern and Mediterranean). Frontal options are either offensive (costing 1 MP and allowing all one's pieces to be used) or attrition (which is free, but none of the moving player's ships or planes can be used). Pieces are moved one at a time, with no stacking of land units allowed except for paratroops (which may also jump onto enemy occupied hexes, but losing the battles results in their certain death). Thus, with a mere three hex frontage for the western campaigns in France, moves and battles must be carefully orchestrated.



Combat occurs by attempting to move into an enemy occupied hex. Ships, planes and armies all fight in pretty much the same manner, with the defending player's unit subject to all the attacks the attacker can throw at him in a single turn. Each attack leaves a favorable die roll modifer for subsequent assaults by an attacker, so escalating battles is often the way to gain a crucial hex.

While the movement of armies, fleets and air forces is all quite elegant, as is the combat system and the differing combat results tables and die roll modifiers used, the interface itself is far from perfect. Pounding directional keys to move a cursor to pick up units and scroll the map just didn't cut it. Apparently, mice don't always work with this game (mine did at home, but not on my computer at work), causing it to lock up if things aren't quite compatible.

State of Computer Cave Art

Big Three supports CGA-(yes, *CGA*) and EGA -level graphics. The documentation is included in a .TXT file that can be printed out or purchased separately in a spiral binder, along with a map card. The 40+ pages of documentation clearly explain the basic and advanced features of the game, including detailed sections on each of the 13 scenarios. The easy -to-envision combat formulas are included and all the rules are explained quite clearly. As for sound support, quite simply, there is none. IBM internal speaker beeps and boops are as far as a player can go. Still, for this game, who cares?

Scenarios Galore

One thing *Big Three* included that I particularly enjoyed was the plethora of scenarios. Many campaigns that only used parts of the map with varying starting and ending dates made for scenarios that could be finished in a half-hour at lunch time. Full campaign game scenarios were available, starting during each year of the war. There was even a scenario design feature for the truly fanatic wargame enthusiasts among us. Each scenario is presented on its own page in the manual, complete with force pools, victory levels, reinforcement schedules and historical notes.

Playing Both Sides

Big Three is a game without any artificial intelligence to assume the role of an opponent. Players will have to either sit a "live one" down at the same computer or "change hats" each player turn. The latter, fortunately, is quite easy to do, making solitaire play practical from a difficulty standpoint. This includes of the fact that fleets and airforces can move in reaction during the enemy's turn. Such "reaction moves," however, are very straightforward and can only be conducted in the face of an enemy offensive option anyway. Consequently, reaction moves are only a niggling problem.



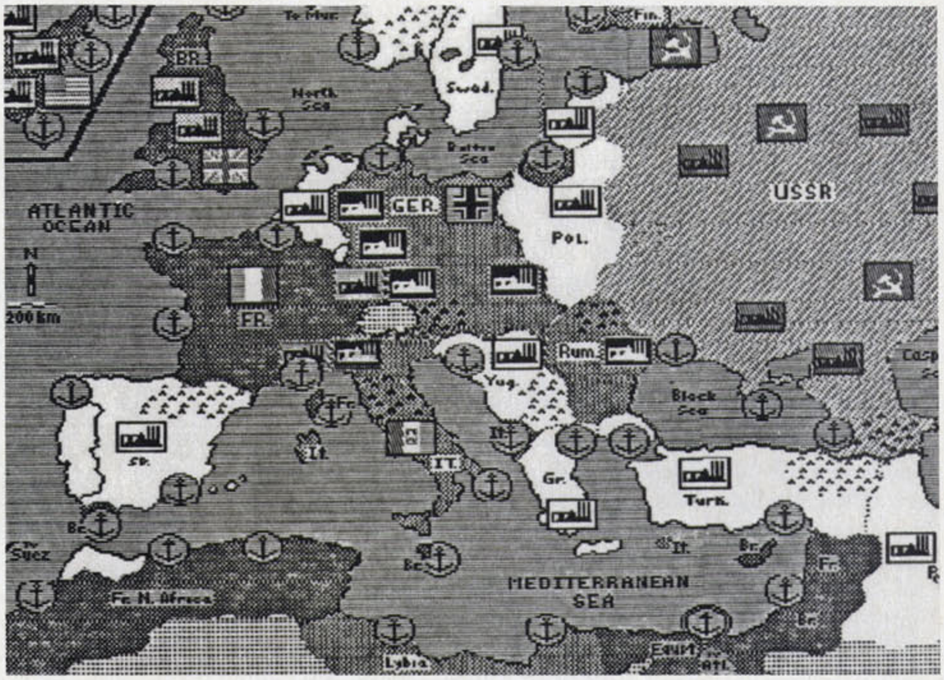
The Wargaming Scheme of Things

Where *Big Three* fits in vis -a -vis its competitors is an interesting question. Ruling out more advanced games on the subject, *Big Three* is probably closest to **Milton Bradley**'s *Axis & Allies*. The pieces are of a similar type, the economic system is even easier and combat system is just as clean, but even more exciting.

Storm Across Europe from **SSI** never really caught on. I would venture that, as a "simple" WWII wargame, it simply didn't go far enough down the complexity scale. Wargamers who like "beer and pretzels" wargaming of the **Milton Bradley** ilk will enjoy *Big Three,* while partisans seeking only more complex wargames will certainly look at this "David" size game facing a "Goliath" size marketing problem, just long enough to laugh at it.

VE Day

On the whole, then, *Big Three* is a refined, evolved design that makes for a highly playable, intriguing and enjoyable simulation. Unfortunately, it is a game in search of development, an artificial opponent and state of the art presentation. Is it a good game? Is a glass half- full or half empty? While many jaded computer wargamers will look down upon this fine effort at self-publishing with a "buy cheap, get cheap" attitude, I cannot. After many hours of repeated play, I must confess that I see *Big Three* more along the lines of "good things come in small packages." May it continue to evolve, for every revision *Big Three* will be a welcome installation to my hard drive. CGW



A Syrian

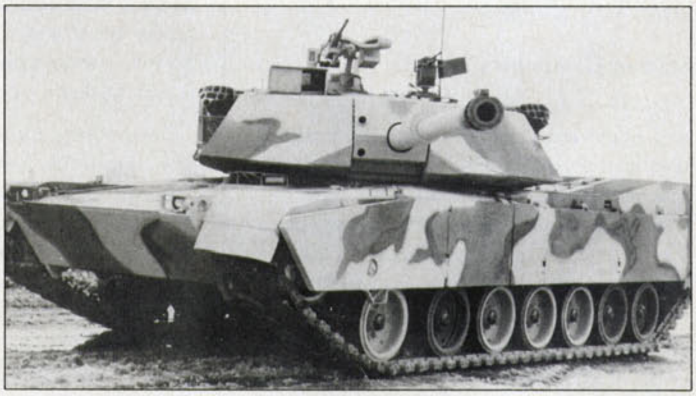
Simulations Canada's Main Battle Tank: Middle East

by Joe Sherfy

TITLE:	Main Battle Tank: Middle East
SYSTEM:	Amiga, Atari ST, and IBM
# PLAYERS:	1-2
PRICE:	$60.00
PUBLISHER:	Simulations Canada Bridgewater, Nova Scotia CANADA

Main Battle Tank: Middle East (*MBTME*) is Simulations Canada's latest offering in its line of games simulating modern tactical armored combat. As with all of Sim-Can's previous simulations in this series, *MBTME* puts the gamer in the shoes of a brigade commander with an order of battle, a map and a grease pencil. (Players have to supply their own cup o' joe and cigar.)

MBTME comes with nine scenarios and a built-in scenario design package. For each scenario, players can choose either side against a friend or the computer. As the commander of a brigade, the player is responsible for ordering combat units into battle and deciphering reports from them to make decisions during battle. The heart of the simulation is its representation of a critical element of modern combat: command and control. Command and control is maintained via radio contact and is subject to the vagaries of enemy jamming, misinterpreted orders and enemy interception.



Your Orders, Sir (Pre-Game Set-up)

The beginning of each scenario is the player's only opportunity to access all units at once. During this set-up phase one cannot alter deployment, but one is able to determine how often a unit reports and what specific events will cause a unit to report (sighting the enemy, engaging the enemy, etc.). Beware, too many reports can cause fatigue at headquarters and hinder staff performance, as well as assisting the enemy artillery in locating the player's HQ. At this time the player may also adjust (from pre-defined settings) each unit's rules of engagement (i.e. tell each unit how aggressive to be toward the enemy). Once these commands are made in the set-up phase, they cannot be changed, so there is a premium on proper planning. During this set-up phase, one can issue orders and assign a time frame in which to carry them out. It is especially important to plan an attack *now* as it may well be too late when the shooting starts.

Once set-up is completed, the resolution phase can begin. During the resolution phase, combat units will attempt to carry out their orders. As time elapses, the player receives unit reports containing information about the location of enemy units and any engagements that take place. Since the game is text only, it does a good job of simulating the atmosphere of a command post and the fog of war. The player charts the progress of his units and the enemy's units on the map and must make snap decisions in issuing new orders given incomplete information. The resolution phase will not only contain unit reports but also will include a stream of information about what those at the command post can hear and see. Pray it's not enemy helicopters!



Commendation Recommended (The Good News)

MBTME does several things very well. It does convey the feeling of being at Command HQ with a staff of officers who are trying to follow a battle that may be raging miles away. It offers a wide range of weapons and nationalities. The scenarios range from a standard Syrian assault on an Israeli defensive position to an American Marine brigade attack on Iraqi troops, including elements of the Republican Guard. Other scenarios include Egyptian and Iranian forces. The weapons represented include the U.S. M1 and M60, as well as British Chieftain, French AMX-30s and Israeli Merkavas. Unlike other tactical armored simulations

Offense

that ignore air power, *MBTME* includes attack helicopters and airstrikes. This reviewer's first attempt at leading a Syrian brigade of T-80s against an entrenched Israeli position resulted in catastrophe when attack choppers found Syrian tanks in the open and destroyed them in just a matter of minutes. It was a hard lesson to learn, but very enlightening. That lesson emphasized that one should entrench first, destroy the choppers and then advance.

Further, the simulation has a wonderful series of "post-mortem" reports available after the conclusion of each battle that allows the player to see what really happened. The post mortem reporting is one feature that would be a welcome addition to any wargame. It is very useful in helping the player determine what went wrong and what might have gone right during a scenario. Finally, the scenario design system is easy to use and will allow one to explore numerous possibilities with the multitude of units available.

Chinks in the Armor (The Bad News)

The documentation could be better. The differences between the various tanks, or any other forces for that matter, are nowhere addressed. No information is given on the effective ranges of the various weapon systems. This is something that must be learned through repeated play. Obviously, of course, this is something a brigade commander would already know.

All of the scenarios are of generic origin, so the historical value of the simulation is limited. The information on terrain effects is limited and must be determined through trial and error and experimentation.

The quality of the computer opponent could be stronger. It appeared during the repeated play of one scenario that the computer directed forces to play approximately the same strategy each time (and not too well at that). Finally, although designed to accommodate play by two people, the system does seem awkward. Delivery of unit reports requires each player to take turns looking at the ceiling (or a magazine, or the television) while his opponent reads a unit report on the monitor. Over the course of a long battle, this can be aggravating.

Uniquely Qualified

MBTME and its sister programs by **SimCan** are unique. They are not recommended for those looking solely for "awesome graphics." Instead, despite some shortcomings, they are recommended to those fans of traditional board wargames who remember how much fun they had playing *Panzerblitz* or *Panzerleader*. The *Main Battle Tank* series, because of its use of limited intelligence and "post mortem" features, is the next step. **CGW**

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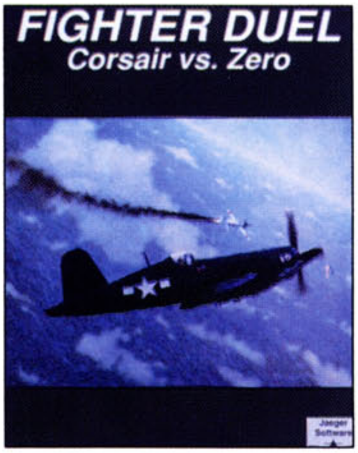
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Crash and Burn

Jaeger Software's Fighter Duel: Corsair Vs. Zero

by Leah Wesolowski

TITLE:	Fighter Duel: Corsair Vs. Zero
SYSTEM:	Amiga
# PLAYERS:	1-2 (two-player, modem only)
PRICE:	$49.95
PROTECTION:	Documentation Look-Up
DESIGNER:	Bill Manders
PUBLISHER:	Jaeger Software 7800 White Cliff Terrace Rockville, MD 20855

As the invisible waves brush the sides of an aircraft carrier in the Pacific Ocean, the pilot enters the cockpit of the Corsair. The dull gray of the instrument panel greets him like a hospital room on base, a hospital room where this pilot is *sure* to land *if* he is lucky. This reviewer has played many flight simulators and air combat war games and has *never* run into the difficulties in flying that *Fighter Duel: Corsair Vs. Zero* represents. Balancing between mouse and joystick in this non-keyboard-controlled game takes a lot of getting used to. Playing in interlace mode with no 'flicker fixer' is not as bad as it could be. However, on a scale of 1-10 this reviewer would give *Fighter Duel: Corsair Vs. Zero* just that, a big zero.

Flight simulators are always welcome in this writer's home. Ranking among the most played games here are *F-15 Strike Eagle* and *Gunship*. It would be a safe bet to place that *Corsair Vs. Zero* will see lots of time on the bookshelf in the future and virtually no time in drive df0:. This flight simulator is so difficult to fly that the longest time in "air" for these veteran pilots is less than five minutes. This reviewer thought she had perhaps lost her touch, that her agility had faded at the still youthful age of 27, that her days as an avid game player were nearing an end! Thankfully, the faith was restored when others who played *Fighter Duel* had the same experience.

What happens when attempting to pilot the Corsair off the aircraft carrier and into the wild blue yonder? At first, all seems to go well; the player uses the mouse to accelerate the craft to take-off speed. Pulling back on the stick gets the plane headed in the right direction. Seconds later the plane falls from the sky and the player must then wait for a lengthy re-load before attempting to try again.

Of Mice and Means

The mouse-controlled flight simulator is unusual. While large keyboard overlays are the norm, Fighter Duel has just three controls to get used to: mouse, joystick and the fire button. Different combinations of these three control methods produce different results. Were this flight simulator capable of flying, this reviewer would imagine that those combinations would take a bit of getting used to.

On one of those rare occasions that this reviewer was able to stay airborne for more than a few seconds, an inadvertent click of the mouse brought up a menu with few options: 'resume training,' 'resume combat,' 'reset' or 'quit'. How ingenious of this game's creator to offer the player such a wide array of choices. The problem here is that the 'resume combat' choice does not work.

Combat Ready (Not!)

On the rare occasion that the Corsair did not crash immediately after take-off, the reviewer awaited the expected enemy fire. None came. Where are the Japs in this game anyway? The manual tells the player to expect heavy firefights yet this reviewer has, as of yet, not laid eyes upon a Zero gunning for the Corsair's fuselage.

Fire!

A call to **Jaeger Software** produced no results, with the tech support guy saying, "Uh, I don't know. Maybe you just don't know how to fly a plane!" This reviewer expects a little more from a software company than that. Perhaps the tech support person was having a bad day. Quite frankly, this reviewer does not care about how well his day was going and expects that when a customer calls, the company should do its best to assist the customer in any way possible.

While it is quite difficult to write a review based on less than five minutes of flight time, it is not difficult to say that this flight simulator is nearly impossible to fly. The game boasts that two can play over a null-modem link. While that is ambitious of them, a two-player option would only benefit this game if it were playable. The three-control system is not a bad idea — in fact this reviewer thinks it might be a nice change (provided it works). The graphics, done in interlace mode, are nothing special. In a nutshell, the non-existent *dog*fight in *Fighter Duel: Corsair Vs. Zero* is a bow-wow. **CGW**

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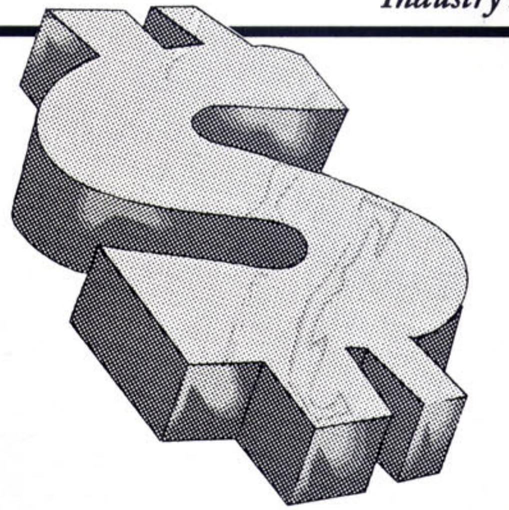
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The Customer Is Always . . . Charged



State of the Industry: It was a busy afternoon at *Computer Gaming World*. One of the editors had to reshoot a screen shot in a hurry or we would miss a deadline. Grabbing the box from the shelf and opening it in one fluid motion, the centrifugal force caused a portion of the contents of said box to slide quickly from the interior of the box to the floor of the game library. Part of those contents turned out to be a "Disk Exchange Form." Now, one of the things that editorial staff members rarely think about is the disk format of a computer game. Since all of the formats are at said staffer's disposal, it is merely a matter of booting the game on the right machine and everything is fine.

Naturally, this is not always the case for the consumer. Some machines only have a 5.25" disk drive and others only have a 3.5" disk drive. In fact, some have never been able to upgrade to drives which handle high density disks. Now, the computer game companies know this. For a couple of years, some of the companies double-packed 5.25" and 3.5" disks in the same box. Many companies still do. Unfortunately, this procedure costs companies in more than one way: a) costing an additional seventy to ninety cents per disk in duplication and raw materials costs for every disk which the consumer does not need and b) costing additional sales when the initial purchaser passes on the other format to his/her friend.

So, many companies elected to package their games in two separate SKUs (shelf keeping units). Most retailers are understanding about this and provide space on the shelves for both SKUs of a given title, but that space does not guarantee that all formats will always be available at any given time. That's where these "Disk Exchange Forms" come into play. The customer buys the wrong format, fills out the form and mails a check, cashier's check or money order for $10.00 along with the form, the product registration card and the original packaged disks to the game company. In return, the game company sends them the desired disk format and all are happy.

Well, not everyone is happy. A lot of consumers are asking, "If the company saves money by only placing one format in a box, why do I have to pay an extra $10.00? Even if they have to pay a customer support person and the mailing fees, aren't they saving money in the long haul?"

As usual, the answer is going to be one of perspective. To understand something of the game companies' perspective, let me illustrate from personal experience. At one time in my educational pilgrimage, I sold cars. I remember going into the sales manager's office on one particular afternoon and complaining to him that the "dirty old" used car appraiser had killed my sale by offering an insulting amount to the customer on the potential trade-in. "Son," said the sales manager with patronizing sympathy, "I'm sorry you lost the sale, but every deal has to stand on its own. We can't afford to get stuck with a trade-in so that we can sell that new car." It took many years before I realized where the logic rested in that position. After all, it had cost me a nice commission. Yet, unlike the unscrupulous practices of some car dealers, his position kept the accounting simple and the deals on the top of the table.

Now, I don't like the fact that the companies are charging the customers for an extra ten bucks. I think it's unfair. If they save 70 cents per disk on eight disks that they do not have to put in 30,000 products, it looks to me like they have a gross savings of $168,000. Now, assuming that even 5,000 customers need to have a disk exchange, the company would have to spend $28,000 on those disks, roughly $5,000 in shipping costs and could still pay $35,000 per year to a customer support person in order to handle those exchanges and still net a savings of $100,000. What's the deal?

"Well, son. Every deal has to stand on its own." It appears that the original cost of goods, where the gross $168,000 in hypothetical savings occurs, is handled in a different department for accounting purposes. The customer support department cannot afford to absorb the cost of goods on the replacement disks, the mailing charges and the support personnel, so they have to have the $10.00 fee in order to break even for their accounting. What does this say to the consumer? It says that accounting is more important than they are. As editor, I would like to offer this space to the company representative that is willing to show specific numbers on a specific product and demonstrate that my hypothetical accounting is wrong and that the publishers do not both save money and charge extra. I could be wrong. I am not privy to the numbers and *if* I'm wrong, I'll have some real facts to present to consumers when they complain about the extra dollars.

The State of the Magazine: *Computer Gaming World* is growing in both editorial and advertising page counts, staff size and circulation. It is a very exciting time. We are adding new departments, experimenting with new kinds of features and evolving a new look. This issue introduces our new art director, Dawn Thompson. We already like some of the nice touches she's added and we are looking forward to great things in the future.

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(PC Games: The Complete PC Gamer's Guide, Spring/Summer 1992)



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